

DOCUMENT RESUME

ED 453 340

UD 034 215

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TITLE The Comparative Costs and Benefits of Programs To Reduce Crime. Version 4.0.
INSTITUTION Washington State Inst. for Public Policy, Olympia.
REPORT NO WSIPP-01-05-1201
PUB DATE 2001-05-00
NOTE 231p.
AVAILABLE FROM Washington State Institute for Public Policy, 110 East Fifth Avenue, Suite 214, P.O. Box 40999, Olympia, WA 98504-0999. Tel: 360-586-2677; Fax: 360-586-2793; Web site: <http://www.wa.gov/wsipp>.
PUB TYPE Numerical/Quantitative Data (110) -- Reports - Research (143)
EDRS PRICE MF01/PC10 Plus Postage.
DESCRIPTORS Adolescents; Adults; *Cost Effectiveness; *Crime Prevention; Delinquency; Early Childhood Education; Early Intervention; *Program Effectiveness; Program Evaluation; Young Children; Youth Programs
IDENTIFIERS *Juvenile Crime; *Risk Reduction; Washington

ABSTRACT

This report describes the economics of programs working to reduce crime in Washington State. For a variety of approaches, from prevention programs designed for young children to correctional interventions for juvenile and adult offenders, it systematically analyzes North American research studies from the past 25 years. For this review, the research literature is divided into four broad topic areas: early childhood programs, middle childhood and adolescent (non-juvenile offender) programs, and adult offender programs. It determines whether program benefits, as measured by the value to taxpayers and crime victims from a program's expected effect on crime, are likely to outweigh costs. This procedure allows direct comparisons of the economics of different types of programs designed for widely varying age groups. Overall, research on what works and what does not has been developed, and, after considering the comparative economics of these options, this information can help improve public resource allocation. These estimates can aid decision makers in directing scarce public resources toward economically successful programs and away from unsuccessful ones, thereby producing net overall gains to taxpayers. This report highlights the Washington State Institute for Public Policy's cost-benefit findings as of May 2001, concluding that: some good and some bad investment options exist, programs that can achieve even relatively small reductions in crime can be cost-beneficial, programs should be evaluated, and a portfolio approach is recommended. (SM)

THE COMPARATIVE COSTS AND BENEFITS OF PROGRAMS TO REDUCE CRIME

Version 4.0

Steve Aos
Polly Phipps
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Roxanne Lieb

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May 2001

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THE COMPARATIVE COSTS AND BENEFITS OF PROGRAMS TO REDUCE CRIME

Version 4.0

Abstract

This report describes the “bottom-line” economics of programs that try to reduce crime. For a wide range of approaches—from prevention programs designed for young children to correctional interventions for juvenile and adult offenders—we systematically analyze evaluations produced in North America over the last 25 years. We then independently determine whether program benefits, as measured by the value to taxpayers and crime victims from a program’s expected effect on crime, are likely to outweigh costs. This procedure allows direct “apples-to-apples” comparisons of the economics of different types of programs designed for widely varying age groups. Our overall conclusion is one of good news: In the last two decades, research on what works and what doesn’t has developed and, after considering the comparative economics of these options, this information can now be used to improve public resource allocation. These estimates can assist decision-makers in directing scarce public resources toward economically successful programs and away from unsuccessful programs, thereby producing net overall gains to taxpayers, even in the absence of new funding sources. This report provides a snapshot of the Institute’s cost-benefit findings as of May 2001.

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May 2001

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Document Number: 01-05-1201

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The Institute's mission is to carry out practical research, at legislative direction, on issues of importance to Washington State. The Institute conducts research activities using its own policy analysts, academic specialists from universities, and consultants. New activities grow out of requests from the Washington legislature and executive branch agencies, often directed through legislation. Institute staff work closely with legislators, as well as legislative, executive, and state agency staff to define and conduct research on appropriate state public policy topics.

Current assignments include projects in welfare reform, criminal justice, education, youth violence, and social services.

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SECTION I: INTRODUCTION

This report describes the “bottom-line” economics of various programs that try to reduce criminal behavior. We identify the types of programs that can, as well as those that apparently cannot, reduce criminal offending in a cost-beneficial way. This research was prepared for the Washington State legislature. The legislature directed the Washington State Institute for Public Policy (Institute) to evaluate the costs and benefits of certain juvenile and adult criminal justice policies, violence prevention programs, and other efforts to decrease particular “at-risk” behaviors of youth.

The analysis focuses on comparative economics. For a wide range of programs—from prevention programs designed for young children to correctional programs for juvenile and adult offenders—we examine whether a program's benefits are likely to outweigh its costs. Significantly, these estimates are derived from a common methodological approach. This allows direct “apples-to-apples” comparisons of the economics of different types of programs designed for widely varying age groups.

This approach is similar to a financial analysis an investment advisor uses to study rates of return on mutual funds, bonds, real estate, commodities, or other investment options. The financial advisor expresses these diverse investments with a common bottom-line metric: the rate of return on investment. The purpose of our analysis of crime control options is the same: the focus is on the *comparative* economic bottom line. That is, given the weight of existing research evidence, which programs and policy options are likely to yield better returns than others?

Among other uses, this information can assist decision-makers in allocating scarce public resources among competing demands. The overall conclusion from this analysis is one of good news: In the last two decades, research on what works and what doesn't has developed and, after considering the comparative economics of these options, this information can now be used to improve public resource allocation. These estimates can be helpful in directing public resources toward the economically successful programs and away from the unsuccessful programs, thereby producing a net overall gain to Washington citizens, even in the absence of new funding sources.

The general procedure followed in this study involves searching for research-based evidence about what works and what doesn't to lower crime rates, and then independently estimating the comparative economics that these programs could have for Washington taxpayers.

As the first step, the Institute systematically reviewed over 400 research studies conducted in the United States and Canada. We focused on studies published in the last 25 years that use sound research methods. We looked for evaluations that measured whether a program reduced the criminality of participants relative to a comparison or control group. Many of the programs we reviewed are designed for youth or adults already in the juvenile or adult justice systems, where the goal is to reduce subsequent criminal activity. Other prevention programs seek to lower the chance that a young person will commit crimes in the first place.

For this review, we divide the research literature into four broad topic areas:

- Early Childhood Programs;
- Middle Childhood and Adolescent (Non-Juvenile Offender) Programs;
- Juvenile Offender Programs; and
- Adult Offender Programs.

While we believe our review covers a substantial portion of existing evaluation research in these four areas, it is likely that we missed some studies. We built this literature review, however, so that as new evaluations are completed, or as relevant previous studies are uncovered, the information can be added to subsequent versions of this report. Thus, the "program inventory" in this report provides an expandable, ongoing base of information to assist Washington State policymakers and program designers.

At present, this review does not include the full range of criminal justice topics. We omit, for example, important research on the effectiveness of policing resources and practices, and the effect of deterrence and incapacitation in sentencing policies. The Institute is currently reviewing available research evidence on these policies. When this work is completed, our cost-benefit analysis can be extended to encompass these and other areas of interest to policymakers.

Our study is limited to evaluations that measure the outcome of criminality. Many, if not most, programs have additional or alternative goals. For example, the primary goals of some prevention programs include reducing teen pregnancy, substance abuse, or dropping out of school; the principal goal of some adult offender programs is to maintain in-prison control of inmates. Although society, program participants, and taxpayers can benefit from changes in these and other behaviors, at present the Institute's analysis is restricted to measuring the costs and benefits of crime-related outcomes. Future work is planned to estimate non-crime related benefits.

After quantitatively reviewing the evaluation literature on what works, we then evaluate program economics from two perspectives. First, there is the taxpayer question. For every dollar of taxpayer money spent on a program, can rates of future criminal activity be reduced to avoid at least that amount in downstream criminal justice costs? In other words, by spending a taxpayer dollar now on a program, will more than one taxpayer dollar be saved in the years ahead? We also consider the crime victim's perspective: if a program can reduce rates of future criminal offending, not only will taxpayers receive benefits but there will also be fewer crime victims. In our economic analyses, we estimate the benefits to both taxpayers and crime victims.

Once all of this information is assembled and analyzed systematically, we then calculate standard economic outcome measures—net present values, benefit-to-cost ratios, and rates of return on investment—for a range of programs options.¹

The reader should be aware of what the cost-benefit estimates presented here are, as well as what they are not. For the most part, the cost-benefit estimates are not evaluations of

¹ The steps to calculate each of these economic outcome measures are defined Section III of this report.

particular programs in Washington—most programs in Washington have not been evaluated formally.² Rather, this analysis reflects what is known about the effectiveness of different programs that have been evaluated anywhere in North America and how, if Washington taxpayer dollars were invested in them, they might be expected to perform in Washington.

In any investment analysis, such as the one presented here, a number of assumptions must be made. Our approach has been to err on the side of caution. The result is that our conservative approach produces benefit-to-cost ratios that may be smaller than other researchers would find. This especially applies to how we analyze the effects of evaluations with weak research designs; for these weaker studies, we explicitly lower the reported crime-reducing effect. While our cautious approach may lower the absolute level of our results, the important point is that we make the same set of conservative assumptions throughout our analysis. This is why we include the word “comparative” in the title to this report; it is probably more useful to compare our results from one program to another, rather than solely focusing on the absolute value of any particular benefit-to-cost ratio.

What Is New in This Edition? The Institute first published a cost-benefit review of programs in May 1999; this report updates that work. Along with several minor improvements, two major features have been added in this version. First, we analyze many more individual program evaluations than we did for the 1999 report. Second, we substantially revise our procedures for statistically analyzing the results of program evaluations. Our procedures now follow standard meta-analytic methods.³ As just described, however, to be cautious in our interpretation of the existing evaluation evidence, we continue to make explicit adjustments for research design quality and a few other factors described in this report.

This report provides a snapshot of the Institute’s cost-benefit model as of May 2001. The analytical effort described here is a “work in progress” and new information and procedures are regularly added to improve the Institute’s estimates of costs and benefits. Several refinements and extensions of the current model are planned for 2001-02 and are discussed briefly.

Generalizing the Results of This Study To Other States. This study estimates the costs and benefits of crime reduction programs from the perspective of taxpayers and crime victims in Washington. We do this by employing Washington-specific cost estimates for the criminal justice system and for the way offenders are processed through Washington’s juvenile and adult systems, including the sentencing practices followed in this state. The degree to which the cost-benefit estimates presented here are applicable to non-Washington jurisdictions will depend on many factors, not the least of which are any differences among justice system costs and sentencing practices.⁴

² There are several outcome evaluations underway of Washington-specific programs. The Institute, for example, is conducting legislatively directed evaluations of particular programs for juvenile and adult offenders. As these evaluations are completed, the results will be incorporated into the analysis presented in this report.

³ In particular, we benefited from the methodological work of Mark Lipsey and David Wilson contained in their very useful book: Lipsey, M. W. & Wilson, D. B. (2000), Practical Meta-Analysis. Thousand Oaks: Sage Publications.

⁴ The Washington-specific cost, sentencing, and recidivism factors are shown on Tables IV-B, IV-D, IV-E, IV-G, IV-H, and IV-I.

The Organization of This Report. Section II presents a summary of our findings. In Section III, we describe in detail the statistical procedures used to estimate the costs and benefits. Section IV presents tables of information listing the data and estimates used in the calculation of costs and benefits.

SECTION II: FINDINGS

The Institute's cost-benefit analysis identifies programs that can make economically sound contributions to Washington's criminal justice and prevention systems. The goal is to find programs that save more money than they cost. To make these determinations, the Institute quantitatively reviewed over 400 program evaluations conducted mostly in North America over the last quarter century.⁵ The Institute organized individual evaluations into policy-relevant topics, such as early childhood education programs, adult drug courts, cognitive-behavioral programs for juvenile sex offenders, and so on. Some program groupings are quite general and some are for very specific, "off-the shelf" programs such as those identified as part of the "Blueprint" project of the University of Colorado's Center for the Study and Prevention of Violence.⁶ Based on our analysis of how well these programs work in lowering crime, the comparative economics were then estimated with the Institute's cost-benefit model, as described in technical detail in Section III.

In this Section, we offer some general findings followed by the specific results of our research.

Five General Findings

1. Some Good Investment Options Exist. From a cost-benefit point of view, we identified some programs that can improve the effectiveness of Washington's taxpayer-financed criminal justice system. That is, compared to Washington's current system, these programs are good bets both to lower crime rates and to lower the net costs of crime to taxpayers and crime victims, thus achieving an enviable "win-win" status.

We found the largest and most consistent economic returns are for certain programs designed for juvenile offenders. Several of these interventions produce benefit-to-cost ratios that exceed twenty dollars of benefits for each dollar of taxpayer cost. That is, a dollar spent on these programs today can be expected to return to taxpayers and crime victims twenty or more dollars in the years ahead. Four of these programs are now being implemented by the juvenile courts in Washington State as a result of recent legislative and administrative actions.⁷ In addition to programs for juvenile offenders, we also found economically attractive prevention programs for young children and adolescents and, at the other end of the age spectrum, for adult offenders.

2. Some Bad Investment Options Exist. Not all of our economic findings, however, are positive. We found some programs that do not lower criminality and have negative economic

⁵ The 400+ evaluations we considered was greater than the 305 actually used in this cost-benefit analysis. As discussed in Section III, the main reason the number used is smaller is that many studies did not meet the Institute's minimum research design standards to be included in the analysis.

⁶ <http://www.colorado.edu/cspv/>

⁷ The economics of the four programs—Multi-systemic Therapy, Functional Family Therapy, Aggression Replacement Training, and coordinated services—are described in this report. The implementation of these programs in Washington are also described on the Institute's website at: <http://www.wa.gov/wsipp/crime/cjaa/home.htm>

bottom lines. Resources spent on these programs would be better directed toward programs that yield positive returns.

We also found programs that demonstrate some success in reducing the criminality of participants, but the cost of running the programs is greater than any savings realized. The economics of crime prevention or intervention require not only program effectiveness (crime reduction), but the services must also be delivered economically. In this regard, crime prevention and intervention is like any business: in order to have a positive economic bottom line, not only does a product need to work and be successful, it also needs to be produced in a cost-efficient manner. In our review of the available options, not all programs passed these two tests.

Thus, the main lesson from our cost-benefit analysis of the evaluation literature is that some prevention and intervention programs are cost-beneficial with certain groups of people in certain settings, and some are not. As with any public or private resource allocation decision, selecting and successfully implementing the right investments for the right populations is the real challenge for policy makers and program administrators.

3. A Program That Can Achieve Even Relatively Small Reductions in Crime Can Be Cost-Beneficial. We found that the best programs can be expected to deliver 20 to 30 percent reductions in recidivism or crime rates for the intended populations. More typical programs, on the other hand, were able to demonstrate only five to ten percent reductions. For example, we found that typical success rates for "good" adult offender programs lower the chance of re-offending by 10 percent. An example can help put this number in perspective. In Washington State, about 50 percent of all adult offenders leaving prison are subsequently re-convicted for another felony offense within eight years from release.⁸ A 10 percent reduction from a 50 percent starting point results in a 45 percent recidivism rate—a significant, but not a huge, reduction. The economic question, however, is whether a reduction of even this modest magnitude, given the cost of the program, produces a net gain for taxpayers and crime victims. The cost of crime to taxpayers (who pay for the criminal justice system) and crime victims (who suffer personal and property losses) is high. Based on our economic analysis of these crime-related costs, we found that programs that can deliver—at a reasonable program cost—even modest reductions in future criminality can have an attractive economic bottom line.

4. Programs Should Be Evaluated. If all programs worked, the need to evaluate individual programs would not be too critical. As an analogy, when the prices of all stocks in the stock market are going up, the most important thing is to be in the stock market, not to spend much time evaluating the prospects of one stock versus another. But since we found that not all programs work, formal evaluations are important to determine if outcomes are being achieved in a cost-beneficial manner. In Washington, as in the rest of the United States, most programs designed to reduce crime have not been rigorously evaluated. Some programs may be working and could be expanded. Others may not be achieving their goals,

⁸ The 50 percent felony recidivism rate is based on longitudinal analyses conducted by the Institute, as described in Section III.

yet continue to absorb scarce tax dollars that could be directed toward more effective programs, or returned to taxpayers. While evaluations are not cost-free, making decisions without objective information on effectiveness can result in inefficient resource allocation. Evaluating the costs and benefits of programs and policies should be a key part of an overall strategy.

5. A Portfolio Approach is Recommended. While the research base for "what works" has improved in recent years, it remains limited and, as a result, a degree of uncertainty must be applied to the economic estimates presented in this report. Therefore, we believe it would be a mistake to allocate all prevention and intervention dollars into any one program no matter how attractive the numbers might look; unfortunately, sometimes bad things happen to good programs. Similar to the situation facing any investor, public policy makers should avoid putting all of the prevention and intervention eggs into one basket. Therefore, we recommend that a "portfolio approach" be developed achieving a reasonable balance between near-term and long-term resources, and between research-proven strategies and those that are promising but in need of research and development. In particular, a portfolio approach should be adopted to reduce the overall risk that some programs, like some stocks in the stock market, may not turn out to be good investments when they are actually purchased and implemented.

Findings: Specific Results

The principal findings from our review are summarized on Table 1. All monetary figures are expressed in 2000 dollars. Before discussing the programs individually, a general description of the information on Table 1 is provided. There are five columns, each describes different results from our analysis.

- The first column shows the number of studies we reviewed in determining the crime-related effects for the program areas.⁹ This is the number of studies that passed the Institute's minimum research design standards to be included in the analysis, as discussed in Section III. In general, the more studies reviewed, the more confidence that can be placed in the findings.
- The second column contains two numbers for each program: the average "effect size" that we expect for each program and the associated "standard error" of the estimated effect size. An effect size is a summary statistic measuring the degree to which research evidence indicates a program can affect an outcome, in this case, crime: the larger the program's effect size, the larger its expected effect on crime outcomes. In this report, a negative effect size means the program reduces crime; a positive effect size means the program increases crime.

⁹ Some evaluations have more than one relevant comparison; we count each comparison as an independent study.

Table 1: Summary of Program Economics (All Monetary Values in 2000 Dollars)

	Number of Program Effects in the Statistical Summary (1)	Average Size of the Crime Reduction Effect* & (Standard Error) note that a negative effect size means lower crime (2)	Net Direct Cost of the Program, Per Participant (3)	Net Benefits Per Participant (i.e., Benefits minus Costs)	
				Lower End of Range: Includes Taxpayer Benefits Only (4)	Upper End of Range: Includes Taxpayer and Crime Victim Benefits (5)
Early Childhood Programs					
Nurse Home Visitation (for low income single mothers)	2	-0.29 (0.21)	\$7,733	-\$2,067	to \$15,918
Early Childhood Education for Disadvantaged Youth	6	-0.10 (0.04)	\$8,936	-\$4,754	to \$6,972
Middle Childhood & Adolescent (Non-Juvenile Offender) Programs					
Seattle Social Development Project	1	-0.13 (0.11)	\$4,355	-\$456	to \$14,169
Quantum Opportunities Program	1	-0.31 (0.20)	\$18,964	-\$8,855	to \$16,428
Mentoring	2	-0.04 (0.05)	\$1,054	\$225	to \$4,524
National Job Corps	1	-0.08 (0.03)	\$6,123	-\$3,818	to \$1,719
Job Training Partnership Act	1	0.10 (0.05)	\$1,431	-\$4,562	to -\$12,082
Juvenile Offender Programs					
Specific "Off the Shelf" Programs					
Multi-Systemic Therapy	3	-0.31 (0.10)	\$4,743	\$31,661	to \$131,918
Functional Family Therapy	7	-0.25 (0.10)	\$2,161	\$14,149	to \$59,067
Aggression Replacement Training	4	-0.18 (0.14)	\$738	\$8,287	to \$33,143
Multidimensional Treatment Foster Care	2	-0.37 (0.19)	\$2,052	\$21,836	to \$87,622
Adolescent Diversion Project	5	-0.27 (0.07)	\$1,138	\$5,720	to \$27,212
General Types of Treatment Programs					
Diversion with Services (vs. regular juvenile court processing)	13	-0.05 (0.02)	-\$127	\$1,470	to \$5,679
Intensive Probation (vs. regular probation caseloads)	7	-0.05 (0.06)	\$2,234	\$176	to \$6,812
Intensive Probation (as alternative to incarceration)	6	0.00 (0.05)	-\$18,478	\$18,586	to \$18,854
Intensive Parole Supervision (vs. regular parole caseloads)	7	-0.04 (0.06)	\$2,635	-\$117	to \$6,128
Coordinated Services	4	-0.14 (0.10)	\$603	\$3,131	to \$14,831
Scared Straight Type Programs	8	0.13 (0.06)	\$51	-\$6,572	to -\$24,531
Other Family-Based Therapy Approaches	6	-0.17 (0.04)	\$1,537	\$7,113	to \$30,936
Juvenile Sex Offender Treatment	5	-0.12 (0.10)	\$9,920	-\$3,119	to \$23,602
Juvenile Boot Camps	10	0.10 (0.04)	-\$15,424	\$10,360	to -\$3,587
Adult Offender Programs					
Adult Offender Drug Treatment Programs (compared to no treatment)					
In-Prison Therapeutic Community, No Community Aftercare	5	-0.05 (0.05)	\$2,604	-\$899	to \$2,365
In-Prison Therapeutic Community, With Community Aftercare	11	-0.08 (0.02)	\$3,100	-\$243	to \$5,230
Non-Prison TC (as addition to an existing community residential facility)	2	-0.17 (0.10)	\$2,013	\$4,110	to \$15,836
In-Prison Non-Residential Substance Abuse Treatment	5	-0.09 (0.03)	\$1,500	\$1,672	to \$7,748
Drug Courts	27	-0.08 (0.02)	\$2,562	-\$109	to \$4,691
Case Management Substance Abuse Programs	12	-0.03 (0.03)	\$2,204	-\$1,050	to \$1,230
Community-Based Substance Abuse Treatment	3	-0.07 (0.05)	\$2,198	\$237	to \$5,048
Drug Treatment Programs in Jails	7	-0.05 (0.05)	\$1,172	\$373	to \$3,361
Adult Sex-Offender Treatment Programs (compared to no treatment)					
Cognitive-Behavioral Sex Offender Treatment	7	-0.11 (0.05)	\$6,246	-\$778	to \$19,534
Adult Offender Intermediate Sanctions (compared to regular programs)					
Intensive Supervision (Surveillance-Oriented)	19	-0.03 (0.03)	\$3,296	-\$2,250	to -\$384
Intensive Supervision (Treatment-Oriented)	6	-0.10 (0.06)	\$3,811	-\$459	to \$5,520
Intensive Supervision: Diversion from Prison	3	0.00 (0.08)	-\$5,925	\$6,083	to \$6,386
Adult Boot Camps	11	0.00 (0.03)	-\$9,725	\$9,822	to \$10,011
Adult Boot Camps--As partial diversion from prison	11	0.00 (0.03)	-\$3,380	\$3,477	to \$3,666
Cognitive-Behavioral Programs (compared to no treatment)					
Moral Reconation Therapy	8	-0.08 (0.05)	\$310	\$2,471	to \$7,797
Reasoning and Rehabilitation	6	-0.07 (0.04)	\$308	\$2,202	to \$7,104
Other Programs (compared to no treatment or regular programs)					
Work Release Programs (vs. in-prison incarceration)	2	-0.03 (0.11)	\$456	\$507	to \$2,351
Job Counseling/Search for Inmates Leaving Prison	6	-0.04 (0.02)	\$772	\$625	to \$3,300
In-Prison Adult Basic Education	3	-0.11 (0.05)	\$1,972	\$1,852	to \$9,176
In-Prison Vocational Education	2	-0.13 (0.04)	\$1,960	\$2,835	to \$12,017
Correctional Industries Programs	3	-0.08 (0.02)	\$1,800	\$1,147	to \$9,413

* The summary effect size shown on this table for each area is the weighted average standardized mean difference effect size. For those studies with bi-variate outcome measures, the mean difference effect sizes are approximated using the arcsine transformation as described in Lipsey & Wilson(2000), Table B10, Formula 22. The individual study effect sizes are adjusted using the Hedges correction for small sample sizes as described in Lipsey & Wilson(2000), page 49, Equation 3.22. The weights are the inverse variance weights as described in Lipsey & Wilson(2000), page 49, Equations 3.23 and 3.24.

In Section III of this report we describe the exact statistical procedures employed to calculate these effect sizes. Technically, the effect size statistic used in this analysis is not quite the same as a percentage reduction in crime rates, but for many of the programs listed, it is close to that more intuitive measurement. For example, an effect size statistic of -.15 for a program for juvenile offenders is roughly equivalent to a fifteen percent reduction in future crime rates for that group. The second number (shown in parentheses) in column (2) is the standard error associated with each effect size. This measure provides a range of the confidence that can be placed in the average effect size: the larger the standard error relative to the effect size, the less confidence that the average effect size is the true effect size.

- The third column on Table 1 shows the estimated net direct cost of the program, per program participant. This is our best estimate of what these programs typically cost per participant. The cost estimates are termed "net" estimates because some programs have an immediate displacement of other program costs. For example, we estimate that the net direct cost of Multisystemic Therapy (MST), a program for juvenile offenders, is \$4,743 per participant. As shown later in this report, that number is derived by taking the estimated per participant cost of MST (\$5,000 in 1997 dollars) and subtracting the direct program costs for other services that MST replaces (\$500 in 1997 dollars), and then converting to 2000 dollars. Some of the net direct costs shown in column (3) are negative. A program with a negative cost means that it saves dollars up-front, even before considering whether the program works to lower the crime rates of the participants. For example, juvenile boot camps have a negative expected cost of \$15,424 per participant. This means that, up front, boot camps are expected to be cheaper than the alternative of longer stays in regular juvenile institutional facilities; hence there is an immediate cost reduction. Note, however, that this cost is only up-front—it does not include the present value of any downstream costs stemming from the program's effect on crime or recidivism rates.
- The fourth and fifth columns of Table 1 provide the main results of our analysis. These are the estimated net economics of the programs—that is, the benefits that a program is expected to produce in terms of future crime reduction, less the costs of the program as listed in column (3). As discussed briefly in the Introduction and in more detail in Section III, the Institute analyzes benefits from the perspective of the taxpayer and the crime victim. For the taxpayer view, the question is whether spending a taxpayer dollar now on a program will save more than a taxpayer dollar in the years ahead. Adding the crime victim view, if a program can reduce rates of future criminal offending, not only will taxpayers receive benefits but there will also be fewer crime victims. On Table 1, column (4) shows the taxpayer-only perspective while column (5) provides an estimate that includes taxpayer and crime victim benefits. Thus the information on column (5) provides the broadest public policy implication afforded from the analysis in this report.

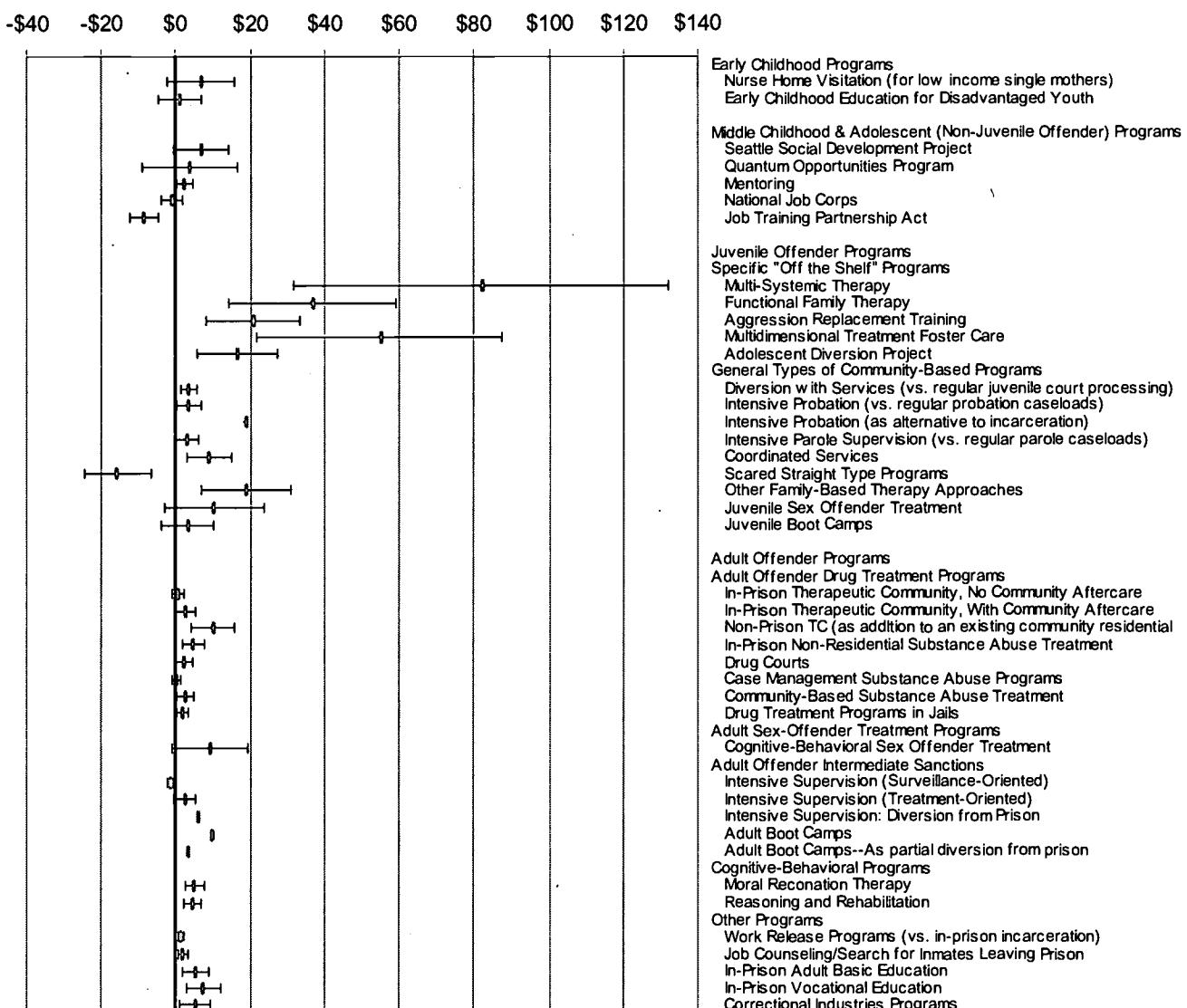
>

The information contained in columns (4) and (5) on Table 1 is also portrayed graphically on Figure 1. For each program, three figures are plotted as a range with a mid point: the lower end of the range is the taxpayer net present value (from column (4) on Table 1) and the upper end of the range is the combined taxpayer-crime victim net present value (from column (5) on Table 1), while the point in the middle of the range is an average of these two figures.

Figure 1: Net Economic Benefits of Programs Designed to Reduce Crime, Monetary Values in 2000 Dollars

Net economic benefit (cost) per participant, thousands of dollars,

*The lower value in the range is the taxpayer estimate,
the higher value includes crime victim benefits,
the point in the middle is the average.*



For each of the programs summarized on Table 1 and Figure 1, an individual table in Section IV-L shows the calculations in detail.

As discussed, we divide the research literature into four broad topic areas:

- Early Childhood Programs;
- Middle Childhood and Adolescent (Non-Juvenile Offender) Programs;
- Juvenile Offender Programs; and
- Adult Offender Programs.

The highlights of our cost-benefit review of the programs for these four areas will now be discussed.

Early Childhood Programs

For our cost-benefit analysis, the Institute identified two types of prevention programs for early childhood. There are, of course, many more prevention programs in the United States and elsewhere. Relatively few, however, have been evaluated rigorously to determine whether subsequent criminality is affected by program participation.¹⁰ By "early childhood," we mean programs designed for youth before they are admitted to kindergarten.

Nurse Home Visitation This program provides intensive visitation by nurses during a woman's pregnancy and the first two years after birth. The goal is to promote the child's development and to provide support and instructive parenting skills to the parents. The program is designed to serve low-income, at-risk pregnant women bearing their first child, and the results reported here are for that group. This brief description of the program is abstracted from the very useful work of the "Blueprints" project at the Center for the Study and Prevention of Violence at the University of Colorado at Boulder. More information on this program, as well as several other programs discussed in this report, can be obtained at their website.¹¹ Other websites also contain very useful information on this and other programs.¹² The evaluation research studies that have examined the nurse home visitation program show that it can be expected to reduce the subsequent criminal activity of participants.¹³ Both the mothers that received the program and their youth had lower criminal outcomes than those not receiving the program in a fifteen-year follow-up evaluation. After reviewing the two outcome evaluations for both the youth and the mothers, the Institute found an overall average effect size of about -.29 for basic crime outcomes. The information on Table 1 reveals that the Nurse Home Visitation program

¹⁰ See, for example, Karoly, L., A., Greenwood, P., W., Everingham, S., S., Hoube, J., Kilburn, M., R., Rydell, C., P., Sanders, M., Chiesa, J. (1998). *Investing in Our Children, What We Know and Don't Know About the Costs and Benefits of Early Childhood Interventions*. Santa Monica: RAND.

¹¹ http://www.colorado.edu/cspv/blueprints/model/ten_nurse.htm

¹² See the Strengthening America's Families website at:

http://www.strengtheningfamilies.org/html/programs_1999/programs_list_1999.html

Also see, "Youth Violence: A Report of the Surgeon General" available at:

<http://www.surgeongeneral.gov/library/youthviolence/default.htm>

¹³ The individual studies used in our review of Nurse Home Visitation, as well as all of the other studies in this entire report, are listed in Section IV, Table IV-K.

costs about \$7,733 per participant. The Institute quantified the value to Washington taxpayers and crime victims expected from these lower crime rates. Columns (4) and (5) on Table 1 summarize our findings. From a taxpayer's perspective (column 4), the benefits of future reduced criminality do not pay back the up-front cost of the program. The expected reduction in crime returns to taxpayers \$5,666 in taxpayer benefits, which partially offset the \$7,733 price tag of the program, producing a net *taxpayer* cost of -\$2,067 as shown on Table 1.

Because of the expected reduced crime levels, however, there will also be fewer crime victims in the future. The estimated benefits of this effect are shown in column (5) of Table 1. For the Nurse Home Visitation Program, the addition of the crime victim benefits to the taxpayer benefits produces an overall positive expected net present value of \$15,918 per program participant. This same number can also be computed as benefit-to-cost ratios (not shown on Table 1): for the Nurse Home Visitation program, the ratio is \$3.06 in benefits per dollar of cost.¹⁴

Early Childhood Education for Disadvantaged Youth The second type of prevention program is identified as "early childhood education for disadvantaged youth." For this general type of program, we analyzes the results of six individual evaluations conducted on programs providing enhanced pre-school education and childcare services to disadvantaged youth, as well as parent support and training in some instances.¹⁵ This group includes the Perry Pre-School, the Chicago Child-Parent Program, the Syracuse Family Development Research Program, the Montreal Longitudinal Experimental Study, and unpublished results from the Abecedarian Project. Rather than estimating the economics of these education programs individually, we performed a meta-analysis of the six studies to determine the average crime-reduction effect of early childhood education programs. We performed this statistical summary to gain increased confidence in our ability to generalize the results for this particular type of prevention intervention.

Our analysis revealed an expected effect size on crime outcomes of about -.12 for the average early childhood education program for disadvantaged youth. The six studies in our summary had an average follow-up time of 14 years. Based on these studies, we estimate that an average early education program costs about \$8,936 per participant. As was the case with the nurse home visitation program, we found that early childhood education does not break even with taxpayers when only the taxpayer savings associated with lower future criminality are considered: the net present value is -\$4,754. Adding the benefits that accrue to crime victims with reduced future criminality, however, increases the expected net present value to a positive \$6,972 per participant, which is equivalent to a benefit-to-cost ratio of \$1.78 for every dollar spent.

Thus, just counting the expected crime-related benefits of these two early intervention programs, the economics of both appear attractive. That is, per dollar spent today on these

¹⁴ \$3.06 = (\$15918 + \$7733) / \$7733

¹⁵ The individual evaluations used in our meta-analysis of early childhood education, as well as all of the other studies in this entire report, are listed in Section IV, Table IV-K.

prevention programs, society is very likely to save considerably more than a dollar in crime-related costs in the years ahead.

As we note in the Introduction, most prevention programs have other goals in addition to reducing crime. Presently, the Institute's cost-benefit model only computes values for crime-related outcomes, although we intend to extend the analysis to quantify the value of other outcomes. How serious a limitation is this omission of non-crime related benefits? The benefits associated with crime reduction are probably the dominant part of the total benefits for many prevention programs. For example, the Perry Pre-School evaluation—no doubt America's most studied long-term evaluation of a single early childhood program—found that crime reduction benefits account for 65 percent of all the benefits estimated by the Perry Pre-School researchers.¹⁶ That is, the Perry Pre-School evaluation calculated a ratio of \$8.74 of *total* benefits to one dollar of cost. Of this amount, the crime reduction benefits alone totaled \$5.70 while all of the other measured benefits of the program (including estimated program effects on earnings, school outcomes, child care, and welfare use) made up the remainder. Thus, because crime is so costly to taxpayers and crime victims, the benefits associated with crime reduction are likely to be the major part of the total benefits that a program might be able to achieve. As another way to look at this, if the 65 percent Perry Pre-School factor just mentioned is applied to our \$1.78 estimate of crime-related benefits to dollar of cost, the ratio would increase to \$2.74 of total benefits per dollar of cost. This is a significant increase, but even without the addition of these benefits, our conclusion is still that the economics of these interventions are fairly attractive.

Note also that the crime-related benefit-to-cost ratio calculated by the Perry Pre-School researchers (\$5.70) is considerably above our estimate of crime related benefits for the average early childhood education program (\$1.78). This difference reflects many factors, but is mostly a function of our cautious crime-reduction assumptions we apply. When we run our cost-benefit model using the exact crime-reduction effects and other program results used by the Perry Preschool researchers, our model indicates \$5.92 in crime-related benefits per dollar of cost for Perry Pre-School, which is almost identical to the \$5.70 figure from the Perry Pre-School research. Again, our approach is to be cautious in estimating the benefits that taxpayers can expect in an up-to-scale application of these programs. Some of the programs upon which we make these estimates were small-scale projects run by committed program developers, and some evaluations had less than optimal research designs. For these and other reasons that we describe in Section III, we prefer to interpret program evaluation results conservatively. Thus our main results—benefit-to-cost ratios in this case—will usually be smaller in absolute magnitude than other researchers might calculate.

¹⁶ Schweinhart, L. J., Barnes, H. V., and Weikart, D. P. (1993). Significant Benefits: The High/Scope Perry Preschool Study through age 27. Ypsilanti, MI: High/Scope Press, Table 43.

Middle Childhood & Adolescent (Non-Juvenile Offender) Programs

We identified five types of prevention programs for middle childhood and adolescent non-juvenile offender populations. As we discussed concerning early childhood programs, there are, of course, many more prevention programs for this population in the United States and elsewhere. Relatively few, however, have been evaluated rigorously and longitudinally to determine whether subsequent criminality is affected by program participation.

The Seattle Social Development Project (SSDP) This program is a three-part intervention for teachers, parents, and students in grades 1 to 6. The focus is elementary schools in high crime urban areas. The intervention trains teachers to manage classrooms to promote students' bonding to the school. SSDP also offers training to parents to promote bonding to family and school. It provides training to children designed to affect attitudes toward school, behavior in school, and academic achievement. More information on this program can be obtained at the Center for the Study and Prevention of Violence's website.¹⁷ After reviewing the one study of SSDP, the Institute found an average effect size of about -.13 for basic crime outcomes. Based on the Institute's estimates, a typical average cost per SSDP participant is about \$4,355. Overall, taxpayers roughly break-even for this investment: the taxpayer-only net present value is -\$456. Adding the benefits that accrue to crime victims as a result of the lower expected future crime increases the net present value estimate to \$14,169 per participant, which is equivalent to a benefit-to-cost ratio of \$4.25 for every dollar spent. As was the case with the early age prevention programs, the only benefit quantified by the Institute was the demonstrated ability of SSDP to lower rates of criminality. The research conducted on SSDP also found beneficial effects related to alcohol use, sexual activity, school commitment and academic performance, among others.¹⁸ At the present time, the Institute's model cannot quantify these benefits, although we intend to develop procedures to do so.

The Quantum Opportunities Program (QOP)¹⁹ This program is designed to serve disadvantaged adolescents by providing education, service, and development activities, as well as financial incentives from ninth grade through high school graduation. QOP is designed for adolescents from families receiving public assistance. Each participant is eligible to receive annually: 250 hours of education (participating in computer-assisted instruction, peer tutoring to enhance basic academic skills, etc.); 250 hours of development activities (participating in cultural enrichment and personal development, acquiring life/family skills, planning for college or advanced technical/vocational training, and job preparation); and 250 hours of service activities (participating in community service projects, helping with public events, and working as a volunteer in various agencies). After reviewing the evaluation of QOP (see Table IV-K), the Institute found an effect size of about -.31 for basic crime outcomes: The program is expensive: the Institute's estimates that a typical average cost per QOP participant is about \$18,964. Overall, from the taxpayer's perspective, these substantial up-front program costs are not recovered by the reduction in

¹⁷ <http://www.colorado.edu/cspv/blueprints/promise/Seattle.htm>

¹⁸ Hawkins, J. David, Catalano, Richard F., Kosterman, Rick, Abbott, Robert, Hill, Karl (1999). "Preventing Adolescent Health-Risk Behaviors by Strengthening Protection During Childhood." *Archives of Pediatrics & Adolescent Medicine* 153: 226-234.

¹⁹ http://www.colorado.edu/cspv/blueprints/model/ten_Quantum.htm

criminal justice system costs stemming from the lower crime rates: the taxpayer-only net present value is -\$8,855. Adding the benefits that accrue to crime victims with reduced future criminality, however, increases the expected net present value to a positive \$16,428 per participant, which is equivalent to a benefit-to-cost ratio of \$1.87 for every dollar spent.

Mentoring The principal evaluation of mentoring in the United States is the study concerning Big Brothers Big Sisters of America (BBBSA).²⁰ Mentoring programs link at-risk youth with volunteer adults. The mentors act as positive resources for youth who may otherwise lack such role models. Length of participation can vary from several months to several years. Contacts usually occur three times monthly, for four hours a visit. Adult mentors are trained to refer any ancillary needs (i.e. substance abuse treatment, or mental or physical health concerns) to program personnel for follow up. The existing evaluation of BBBSA did not measure criminal outcomes directly (the question tested was the "number of times hit someone"). Therefore, the Institute lowered the estimated effect of BBBSA in its cost-benefit calculations (from an effect size of -.13 to -.06). The Institute also included the longitudinal results of the Cambridge-Somerville Youth Study in this summary of mentoring effects on subsequent crime (see Table IV-K). After reviewing the research findings for the two mentoring studies, the Institute found an effect size of about -.04 for basic crime outcomes. Based on the Institute's estimates, a typical average cost per mentoring participant is about \$1,054, although this figure apparently does not include the often substantial costs of volunteer time on the part of the mentor—a defect in the evaluation evidence on mentoring. Overall, taxpayers just break-even for this investment: the taxpayer-only net present value is \$225. Adding the benefits that accrue to crime victims as a result of the lower expected future crime increases the net present value estimate to \$4,524 per participant, which is equivalent to a benefit-to-cost ratio of \$5.29 for every dollar spent.

National Job Corps According to the US Department of Labor, the Job Corps program provides "employment assistance to disadvantaged youths between the ages of 16 and 24. Job Corps is an intensive, comprehensive program whose major service components include academic education, vocational training, residential living, health care and health education, counseling, and job placement assistance....Most Job Corps students reside at Job Corps centers while training, although about 12 percent are nonresidential students who live at home....The National Job Corps Study, funded by the U.S. Department of Labor (DOL), was designed to provide a thorough and rigorous assessment of the impacts of Job Corps on key participant outcomes. The cornerstone of the study was the random assignment of all youth found eligible for Job Corps to either a program group or a control group. Program group members were allowed to enroll in Job Corps; control group members were not (although they could enroll in other training or education programs)."²¹

²⁰ http://www.colorado.edu/cspv/blueprints/model/ten_Big.htm

²¹ Schochet, P. Z., Burghardt, J., and Glazerman, S. (2000). National Job Corps Study: The Short-Term Impacts of Job Corps on Participants' Employment and Related Outcomes, Washington D.C.: U.S. Department of Labor.

The Institute used the findings for the 16 and 17 year old youth studied in the evaluation. After reviewing the national evaluation (see Table IV-K), the Institute found an average effect size of about -.08 for basic recidivism. Based on the Institute's estimates, a typical average cost per Job Corps participant is about \$6,123. Overall, taxpayers do not recover this cost in subsequent criminal justice cost savings for each program participant: the taxpayer net present value is -\$3,818. Adding the benefits that accrue to crime victims, however, increases the expected net present value to \$1,719 per participant, which is equivalent to a benefit-to-cost ratio of \$1.28 for every dollar spent.

The Job Training Partnership Act (JTPA) According to the federal law that established the JTPA, the act was intended to "prepare youth and unskilled adults for entry into the labor force and to afford job training to those economically disadvantaged individuals and other individuals facing serious barriers to employment, who are in special need of such training, to obtain employment." The US Department of Labor noted that the JTPA provided "job-training services for economically disadvantaged adults and youth, dislocated workers and others who face significant employment barriers. Title II-A authorizes training and services for the economically disadvantaged and others who face significant employment barriers. Program services include an assessment of an unemployed individual's needs and abilities and a strategy of services such as classroom training, on-the-job training, job-search assistance, work experience, counseling, basic skills training and support services."

The national evaluation of the Act, conducted by ABT Associates,²² reported results for both youth and older participants; for our review of adolescent programs, we only used the findings for the young participants. The average effect size was +.10 for basic crime rates, meaning recidivism rates were, on average, higher for the youthful JTPA participants than for a randomly assigned control group. We estimate that the additional cost of JTPA participation is about \$1,431 per participant. From the taxpayers perspective, this cost combines with the increased taxpayer criminal justice system costs for increased crime to produce a negative bottom line of -\$4,562 per participants. Adding the costs that accrue to crime victims because of the increase in crime further lowers the net present value to - \$12,082.

²² Bloom, H., Orr, L. O., Cave, G., Bell, S. H., Doolittle, F., and Lin, W. (1994). *The National JTPA Study. Overview: Impacts, Benefits and Costs of Title II-A*. Cambridge, Massachusetts: Abt Associates Inc.

Juvenile Offender Programs

We divide our cost benefit review of juvenile offender programs into two groups: those that are specific programs, and those that reflect more general types of programs.

Specific “Off the Shelf” Programs

In recent years, something resembling a “market” has started to develop for juvenile offender programs and some of these approaches are being replicated around the United States. For our cost-benefit review, we categorized these programs as specific “off the shelf” programs that follow a prescribed approach to program implementation. These programs are different from the more generic approaches (discussed below) in that there are manuals, training protocols, and phone numbers to call. There are now even “brokers” in this emerging marketplace for juvenile offender programs. For example, the Blueprint program of the University of Colorado’s Center for the Study and Prevention of Violence serves as an intermediary between program developers and end users. The specific juvenile offender programs listed on Table 1 include Multisystemic Therapy, Functional Family Therapy, Aggression Replacement Training, Multidimensional Treatment Foster Care, and the Adolescent Diversion Project. The economics of these programs are generally the most attractive of any programs we reviewed in our entire cost-benefit analysis. Most of these programs are designed for youthful offenders in a juvenile court setting or, in the case of the Adolescent Diversion Project, as an alternative to juvenile court processing. There have also been some recent efforts—as yet unevaluated—to use these approaches for juvenile offenders in institutional settings, or as part of the transition from an institutional setting to the community.

Multi-Systemic Therapy (MST) This is an intensive home-based intervention for chronic, violent, or substance abusing juvenile offenders, ages 12 to 17. Trained therapists work with the youth and his or her family. The MST intervention is based on several factors, including an emphasis on addressing the causes of delinquency. The treatment services are delivered in the youth's home, school, and community settings, with a strong focus on treatment adherence and program fidelity. Service duration averages 60 hours of contact over four months. Each MST therapist works in a team of four therapists and carries a caseload of four to six families. This brief description of the program is abstracted from the “BluePrints” project at the Center for the Study and Prevention of Violence at the University of Colorado, Boulder.²³ Interested readers can visit the Blueprints website to learn more about this (and other) programs. The Institute's review of national research found that MST has been rigorously evaluated in several settings, although we would like to see more replications in diverse settings. After reviewing the evaluations (see Table IV-K), the Institute found an average effect size of about -.31 for basic recidivism. Based on the Institute's estimates, a typical average cost per MST participant is about \$4,743. Overall, taxpayers gain approximately \$31,661 in subsequent criminal justice cost savings for each program participant. Adding the benefits that accrue to crime victims increases the

²³ http://www.colorado.edu/cspv/blueprints/model/ten_Multisys.htm

expected net present value to \$131,918 per participant, which is equivalent to a benefit-to-cost ratio of \$28.33 for every dollar spent.

Functional Family Therapy (FFT) This program targets youth, aged 11 to 18, with problems of delinquency, violence, and substance use. FFT focuses on altering interactions among family members and seeks to improve the functioning of the family unit. FFT is provided by individual therapists, typically in the home setting, and focuses on increasing family problem solving skills, enhancing emotional connection, and strengthening the parental ability to provide appropriate structure, guidance, and limits to their children. FFT generally requires 8 to 12 hours of direct service to youth and their families, and generally no more than 26 hours for the most severe problem situations. As with MST, this brief description of the FFT is abstracted from the "BluePrints" project at the Center for the Study and Prevention of Violence at the University of Colorado, Boulder.²⁴ The Institute's review of national research found that FFT has been evaluated in several settings. After analyzing the individual FFT research findings (see Table IV-K), the Institute found an average effect size of about -.25 for basic recidivism. Based on the Institute's estimates, a typical average cost per FFT participant is about \$2,161. Overall, taxpayers gain approximately \$14,149 in subsequent criminal justice cost savings for each program participant. Adding the benefits that accrue to crime victims increases the expected net present value to \$59,067 per participant, which is equivalent to a benefit-to-cost ratio of \$28.81 for every dollar spent.

Aggression Replacement Training (ART)²⁵ This program is a cognitive-behavioral intervention that attempts to reduce the anti-social behavior, and increase the pro-social behavior, of juvenile offenders. ART has three components. In the "anger control" component, participants learn what triggers their anger and how to control their reactions. The "skill-streaming" behavioral component teaches a series of pro-social skills through modeling, role playing, and performance feedback. In the "moral reasoning" component, participants work through cognitive conflict through "dilemma" discussion groups. The program is run in groups of 8 to 10 juvenile offenders, which helps keep the per participant cost lower than individually-focused interventions. The Institute's review of ART research found only a few evaluations of these programs (see Table IV-K). Using the Institute's weighting scheme to combine the study results, the evaluations have an average effect size of -.18 for basic recidivism. Based on the Institute's estimates, a typical average cost per ART participant for this group-based intervention is about \$738. Overall, taxpayers gain approximately \$8,287 in subsequent criminal justice cost savings for each program participant. Adding the benefits that accrue to crime victims increases the expected net present value to \$33,143 per participant, which is equivalent to a benefit-to-cost ratio of \$45.91 for every dollar spent.

Multidimensional Treatment Foster Care (MTFC) is an alternative to group residential placement for high-risk and chronic juvenile offenders. Youth are placed with two trained and supervised foster parents for six to 12 months, and the youth's parents participate in

²⁴ http://www.colorado.edu/cspv/blueprints/model/ten_Function.htm

²⁵ <http://www.wa.gov/wsipp/crime/cjaa/Programs/program.html#ART>

family therapy. Near the end of the child's stay, the youth and his or her parents participate together in family therapy. The intervention is intensive, with at most two, and usually one, youth placed in the foster family. Families are recruited, trained, and closely supervised. MTFC-placed adolescents are given treatment and intensive supervision at home, in school, and in the community; clear and consistent limits with follow-through on consequences; positive reinforcement for appropriate behavior; a relationship with a mentoring adult; and separation from delinquent peers. MTFC training for community families emphasizes behavior management methods to provide the youth with a structured and therapeutic living environment. (As with MST and FFT, this brief description of the MTFC is abstracted from the "BluePrints" project at the Center for the Study and Prevention of Violence at the University of Colorado, Boulder.²⁶) After reviewing the two evaluations of MTFC (see Table IV-K), the Institute found an effect size of about -.37 for basic recidivism. A typical cost per MTFC participant is \$2,052. Note that this cost is the net difference between a placement in MTFC versus a regular group home situation; this cost could vary significantly depending on the resource it displaces. Overall, taxpayers gain approximately \$21,836 in subsequent criminal justice cost savings for each program participant. Adding the benefits that accrue to crime victims increases the expected net present value to \$87,622 per participant, which is equivalent to a benefit-to-cost ratio of \$43.70 for every dollar spent. Note that there is some uncertainty in these estimates about the net cost of the program itself (assumed to be \$2,052 in this analysis). Even if the actual cost is considerably higher, however, the underlying economics of this approach are likely to be favorable given the substantial positive results reported here.

The Adolescent Diversion Project (ADP) This program stems from research experiments conducted in the 1970s and 1980s where youth were diverted from the juvenile court to prevent labeling as "delinquent." ADP "change agents" (usually college students) work with youth in their environment to provide community resources and initiate behavioral change. Change agents are trained in a behavioral model (contracting, with rewards written into actual contracts between youth and other significant persons in the youth's environment) and to become advocates for community resources. Youth and change agents are matched, whenever possible, on race and gender. The evaluation results are for males only. After reviewing the ADP evaluations (see Table IV-K), the Institute found an average effect size of about -.27 for basic recidivism. Based on the Institute's estimates, a typical average cost per ADP participant is about \$1,138. Overall, taxpayers gain approximately \$5,720 in subsequent criminal justice cost savings for each program participant. Adding the benefits that accrue to crime victims increases the expected net present value to \$27,212 per participant, which is equivalent to a benefit-to-cost ratio of \$24.91 for every dollar spent.

General Types of Juvenile Offender Programs

Other programs for juvenile offenders have not developed to the "market-like" stage of the programs just described. For these programs, we categorized the existing evaluations into

²⁶ http://www.colorado.edu/cspv/blueprints/model/ten_multidim.htm

logical groupings of programs; for example, we summarize the results, using the meta-analytic procedures described in Section III of this report, of the existing studies on juvenile intensive probation and intensive parole. We then estimate the economics for these general approaches given the strength of the research evidence behind them. One effect of this generalizing process is to mask some of the individual differences of particular programs. Not all intensive supervision programs, for example, are the same. Our results, therefore, should be interpreted as statements about the economic effect of the average approach for each category studied. As with any average, some programs will do better than the average, while some will do worse. The purpose of these categories is to estimate the expected effect of different types of programs given the evidence of all programs that have been tried and evaluated.²⁷ As the following results indicate, the economics of some approaches appear promising, while some do not.

Diversion with Services (vs Regular Juvenile Court Processing) The Institute conducted a meta-analysis of 13 studies that focused on juvenile court diversion programs where providing services to the youth was an important element. These programs are usually designed for low risk, first time juvenile offenders who would otherwise have their cases handled formally in the juvenile court. This is a diverse set of programs that include citizen accountability boards and counseling services provided by other social service agencies.²⁸ After reviewing the evaluations (see Table IV-K), the Institute found an average effect size of about -.05 for basic recidivism. Based on the Institute's estimates, a typical average cost per program participant is a negative \$127; that is, the added cost of a diversion service is, on average, cheaper than the cost of normal juvenile court processing. Overall, taxpayers gain approximately \$1,470 in subsequent criminal justice cost savings for each program participant. Adding the benefits that accrue to crime victims increases the expected net present value to \$5,679 per participant.

Intensive Supervision Programs We found 20 evaluations of juvenile intensive supervision programs that met our minimum research design standards (see Table IV-K). For our cost-benefit analysis, we divided this set of studies into three types:

- Intensive probation supervision vs. regular probation caseloads (7 studies)
- Intensive parole supervision vs. regular parole caseloads (7 studies)
- Intensive probation as an alternative to incarceration (6 studies)

The evidence on intensive probation and parole indicates that these types of programs can, on average, have a small reduction in recidivism rates compared to regular probation or parole. The effect sizes from our analysis of the evaluations of intensive probation and parole vs. regular caseloads were similar at -.05 and -.04, respectively. We estimate that the extra costs of these two approaches (i.e., the costs in excess of the cost of regular supervision) are also similar, at about \$2,500 per offender. Given these parameters, the economics of these programs produce net present values that roughly pay the taxpayer

²⁷ For technical readers, for each of the meta-analyses we perform on these program areas, we calculate homogeneity tests, see Table VI-A.

²⁸ Some evidence on other types of diversion programs, shown in Table IV-K, include diversion without services (simple release) vs regular court processing, and diversion with services vs. simple release.

back for the extra cost, and they produce gains of \$5,000 to \$6,000 per participant when the benefits to crime victims are considered. The equivalent benefit-to-cost ratios are about \$4 of benefits per dollar of cost. These rate-of-return numbers are considerably lower than those for the specific "off the shelf" treatment programs described above, but they do demonstrate economics that are more attractive than regular probation and parole services.

There have also been attempts to use juvenile probation supervision as an alternative to incarceration; we found six evaluations of this approach that met our minimum research design standards. The average effect of the programs was zero; that is, on average there was no difference in recidivism rates between those juveniles incarcerated and those placed on intensive probation. It was cheaper, however, to use probation instead of incarceration; we estimate the difference at about \$18,478 per youth diverted. With no apparent difference in recidivism rates, the net present value becomes the \$18,000 to \$19,000 in savings.

Coordinated Services²⁹ We found four evaluations of programs for juvenile offenders where the "treatment" was devoting resources to coordinating existing multi-agency resources in the community and focusing those resources on the youth. The purpose of this intervention approach is to use existing resources in the community more effectively. This approach has sometimes been called "wraparound" services. After reviewing the four evaluations (see Table IV-K), the Institute found an average effect size of about -.14 for basic recidivism. Based on the Institute's estimates, a typical average cost per participant for this brokerage-advocacy service is about \$603. Overall, taxpayers gain approximately \$3,131 in subsequent criminal justice cost savings for each program participant. Adding the benefits that accrue to crime victims increases the expected net present value to \$14,831 per participant, which is equivalent to a benefit-to-cost ratio of \$25.59 for every dollar spent.

Juvenile Boot Camps The Office of Juvenile Justice and Delinquency Prevention (OJJDP) funded demonstration programs at three sites to develop prototypical boot camp and aftercare programs for male juvenile offenders (Cleveland, Denver, and Mobile). According to OJJDP, the programs were intended to: serve as a cost-effective alternative to institutionalization; promote discipline through physical conditioning and teamwork; instill moral values and a work ethic; promote literacy and increase academic achievement; reduce drug and alcohol abuse; encourage participants to become productive law-abiding citizens; and ensure that offenders are held accountable for their actions. Our review of the ten existing evaluations of juvenile boot camps (the three federal projects as well as seven boot camps in California and Florida, see Table IV-K) indicated that, relative to comparison groups, juvenile offenders in these programs had higher, not lower, subsequent recidivism rates. The average effect size was a positive .10, meaning recidivism rates were, on average, about 10 percent higher for boot camp participants compared to juvenile offenders who went through regular juvenile institutional facilities. We estimate that these boot camps are cheaper up front (hence the negative \$15,424 shown on Table 1, Column (3), but the increased costs to taxpayers and crime victims associated with the higher recidivism rates

²⁹ <http://www.wa.gov/wsipp/crime/cjaa/Programs/program.html#CS>

more than offset the up-front taxpayer savings. This produced an expected negative bottom line of \$3,587 per boot camp participant.

Scared Straight Type Programs We found eight existing evaluations of these programs (see Table IV-K). These programs typically take young juvenile offenders to an adult prison where they are lectured by adult offenders about how their life will turn out if they don't change their ways. The Institute's review of studies found an average effect size of +.13 for basic recidivism, meaning that recidivism rates were, on average, about 13 percent higher for scared straight type program participants compared to juvenile offenders who went through regular juvenile case processing. We estimated a nominal per participant cost of about \$50 to run a scared straight type program. Overall, because of the higher expected recidivism, taxpayers lose approximately \$6,572 in increased subsequent criminal justice costs for each program participant. Adding the increased costs that accrue to crime victims from the higher recidivism rates increases the negative expected net present value to - \$24,531 per participant.

Other Family-Based Therapy Approaches We found six evaluations (see Table IV-K) of programs for juvenile offenders that employed a family-based approach to counseling, somewhat similar to the approaches taken in MST and FFT, as described earlier. These programs differ from each other, but are grouped for this cost-benefit analysis because the underlying approach involved working with both the youth and his or her family members. After analyzing these six studies using meta-analytic techniques, the Institute found an average effect size of about -.17 for basic recidivism. Based on the Institute's estimate of what these diverse programs might cost, a typical average cost per program participant is about \$1,537. With these parameters, taxpayers gain approximately \$7,113 in subsequent criminal justice cost savings for each program participant. Adding the benefits that accrue to crime victims increases the expected net present value to \$30,936 per participant, which is equivalent to a benefit-to-cost ratio of \$21.13 for every dollar spent. The result for this class of programs is general and suggestive only. Since the positive economics of these family-based approaches is similar to those of the specific MST and FFT programs, it provides additional evidence that the focus on family-based therapy for certain types of juvenile offenders makes economic sense..

Juvenile Sex Offender Treatment In the last few years several evaluations have been published on programs for juvenile sex offenders (see Table IV-K). Most of these programs are of recent origin and follow primarily a cognitive-behavioral approach to treatment. After meta-analyzing the five evaluations we located on this topic, the Institute found an average effect size of about -.12 for basic recidivism, but with a fairly wide error range around this average effect (standard error = .10). This increases the uncertainty about the effectiveness of this form of treatment and points to the need for more research studies in this area. Based on the Institute's estimates, a typical average cost per participant is assumed to be about \$9,920. At this price, taxpayers lose approximately \$3,119 per participant, but, adding the benefits that accrue to crime victims, the bottom line turns positive with an expected net present value of \$23,602 per participant, which is equivalent to a benefit-to-cost ratio of \$3.38 for every dollar spent. As will be discussed in the latter

section on adult sex offender treatment, sex offenders tend to specialize in sex re-offenses when they re-offend. We found for the juvenile sex offender studies considered here that the programs have more of an effect on sex offense re-offense rates (effect size -.17) than on overall re-offense rates (effect size -.12). The Institute's cost benefit model takes this into account when it calculates the benefits of crime reduction, as described in the above economic estimates. At this time, the expected economic bottom line for cognitive-behavioral programs for juvenile sex offenders appears positive, but more research is needed to confirm the efficacy of these early results.

Adult Offender Programs

We categorized the large program evaluation literature for adult offenders into four broad areas, along with a miscellaneous category of programs (see Table IV-K). We separately analyzed drug treatment programs, sex-offender treatment programs, two types of intermediate sanctions (intensive supervision and boot camps), two types of specific cognitive-behavioral programs, and several other programs including work release, basic education, vocational education, and correctional industries programs.

Adult Offender Drug Treatment Programs

We divided the adult offender drug treatment evaluation literature into eight subcategories based on the type and location of drug treatment delivery.

- In-Prison Therapeutic Community, Without Community Aftercare
- In-Prison Therapeutic Community, With Community Aftercare
- Non-Prison Therapeutic Community
- In-Prison Non-residential Substance Abuse Treatment
- Drug Courts
- Case Management Substance Abuse Programs
- Community-Based Substance Abuse Treatment
- Drug Treatment Programs in Jails

Before discussing these areas individually, we offer this general finding regarding drug treatment for adult offenders. Generally, drug treatment for adult offenders works to lower criminal recidivism rates. The degree to which recidivism is reduced is not large—single digit, not double digit, percentage reductions in recidivism rates should be expected. Nonetheless, with treatment typically costing about \$2,500 per participant, the net economics of drug treatment appear positive, on average. The programs roughly break even from a taxpayer-only perspective and, including the benefits crime victims receive when recidivism rates are reduced, the programs typically produce about three dollars in benefits per dollar of cost.

In-Prison Therapeutic Community, Without Community Aftercare This approach provides a separate residential facility within a prison and incorporates the basic approaches employed in the therapeutic community (TC) mode of drug treatment. Therapeutic community programs involve group and individual interaction, including peer counseling, confrontation, cognitive and behavioral restructuring, recovery education, and 12-step activities. The effects measured here are for in-prison TC treatment only, without follow-up community "aftercare" treatment once an offender is released from prison. The Institute located five study results that we include in our meta-analysis of this approach to drug treatment. The effect size for crime outcomes was relatively small (-.05). We estimate that the additional cost of a TC (that is, above normal incarceration costs) is about \$2,604 per participant. In all of our analyses, participants include those that complete and those that dropout of the program. The net economics of this approach appear marginally attractive. As shown on columns (4) and (5) of Table 1, the expected reduction in recidivism rates is not sufficient to pay taxpayers back for the \$2,604 cost—the net present value is a minus \$899. Viewed from the broader perspective that includes taxpayer and crime victim benefits, however, this approach does appear to have a positive economics returning a net \$2,365 per participant (this produces a benefit to cost ratio of \$1.91 of benefits per dollar of cost).

In-Prison Therapeutic Community, With Community Aftercare This drug treatment approach includes the in-prison TC discussed above, but also provides follow-up drug treatment (usually outpatient) once the offender is released to the community. In our meta-analysis of this approach, we located 11 study effects that measured this approach and that met our minimum research design standards. We found that the addition of community aftercare increases the expected effect size (to -.08, up from the -.05 for the TC without aftercare) and increases the cost of the treatment program to \$3,100. The rather small increase in costs and treatment effectiveness reflects the difficulty that some programs have had in keeping released offenders in the community aftercare component of the treatment package. Our analysis measures the costs and effectiveness of program completers and non-completers. Thus, to the degree that programs fail to maintain high treatment participation rates in the community aftercare component, both the costs and benefits will tend toward the TC approach that does not include community aftercare. Based on our analysis, we expect the economics of this TC-aftercare approach to be better than the TC-only approach. Taxpayers are almost paid back for their initial investment (the net present value is -\$243 per participant) and the broader societal view that includes crime victim benefits produces an expected net present value of \$5,230 per participant (producing a benefit-to-cost ratio of \$2.69 of benefits per dollar of cost). The increased number of studies that have measured this approach, and the degree to which the analyzed results converge, increases the confidence that can be placed in these findings.

Non-Prison Therapeutic Community We found only two evaluations of TCs for offenders that were not prison-based. These community-based facilities were additions to existing community-based offender facilities, typically work-release facilities. This is important, because the cost of a free-standing community-based TC would be considerably higher than what we have estimated here. Our analysis of the two studies revealed an impressive

average effect size (-.17) but, because there are only two studies, a wide error band around this mean effect must be considered (standard error of .10). Since a 95 percent confidence interval would include the possibility of a zero effect, a considerable amount of uncertainty should be included in the assessment of the effects shown here. Nonetheless, if a non-prison TC costing about \$2,000 per offender can achieve an effect of -.17 on recidivism rates, then the economics of this approach appear quite attractive. The net present values would range from \$4,110 per participant from the taxpayer-only perspective to \$15,836 including crime victim benefits. The later net present value is equivalent to a benefit-to-cost ratio of \$8.87 of benefits per dollar of cost.

In-Prison Non-residential Substance Abuse Treatment A diverse collection of treatment interventions for substance abusing offenders have operated in prisons, including drug education, group and individual therapy, and relapse prevention. The programs are usually non-residential (that is, inmates receiving treatment are not housed in separate quarters), and the length of treatment ranges from several weeks to approximately six months. We found five studies that met the Institute's minimum research design standards to include in our meta-analysis of this program area. The economics of this general approach to treatment appear positive: the average effect size was -.09 and, at an estimated cost of \$1,500 per participant, the net present values range from \$1,672 per participant from the taxpayer-only perspective to \$7,748 including crime victim benefits. The later net present value is equivalent to a benefit-to-cost ratio of \$6.17 of benefits per dollar of cost

Drug Courts First introduced in Dade County, Florida in 1989, a typical drug court targets non-violent offenders whose current involvement with the criminal justice system stems primarily from substance addiction. Defendants eligible for a drug court are identified soon after arrest and, if accepted, are referred to a treatment program. The court usually requires several contacts per week (often daily) with a treatment provider. Frequent urinalysis tests and regular status hearings with the drug court judge are key elements. Many drug courts require participants to maintain employment and honor financial obligations, including court fees and child support, as well as performing community service.

There have been an increasing number of evaluations of drug courts in recent years. We were able to include 26 effects of drug courts, although a number of these stem from one researcher's (Goldkamp 99) multi-cohort review of two drug courts. In our meta-analysis, we included each of these cohorts as separate trials even though they probably are not as independent as evaluations of separate courts by several different researchers. Our analysis revealed an expected effect size of -.08 with a fairly small standard error (.02) indicating a reasonable and significant level of confidence in the average result. With an estimated average price tag of \$2,562 per participant, drug courts are expected to almost break even from a taxpayer's perspective (-\$109 in column 4 of Table 1) and produce \$4,691 in net benefits per participant when crime victim benefits are included in the economic bottom line. The later net present value is equivalent to a benefit-to-cost ratio of \$2.83 of benefits per dollar of cost.

Case Management Substance Abuse Programs Offenders in the community are often referred to substance abuse treatment through a case management program, which provides a liaison between the criminal justice system and treatment programs. These programs usually assess offender needs, provide a monitoring function, and either provide or refer offenders to services. Community-based treatment usually involves outpatient substance abuse treatment and, to a lesser extent, residential treatment. The Institute's review of national research found twelve evaluations of these programs (that met our minimum research design standards), many with strong research designs. Using the Institute's weighting scheme to combine the study results, the evaluations have an average effect size of -.03 for recidivism, essentially no effect. The standard error on this average effect is also .03 indicating that the true average effect could be zero. We estimate that the average case management program costs \$2,204 per participant (including treatment costs). At this price, taxpayers lose \$1,050 in criminal justice system benefits for every dollar spent. Including crime victim benefits increases the net present value to a positive \$1,230, equivalent to a benefit-to-cost ratio of \$1.56 of benefits per dollar of cost.

Community-Based Substance Abuse Treatment Community-based treatment for offenders usually involves outpatient substance abuse treatment and, to a lesser extent, residential treatment, with a limited number of offenders participating in methadone maintenance programs. The Institute's review of the national research found only three evaluations of community substance abuse treatment programs that were independent of case management programs. The average effect size for these three evaluations was -.07 but the standard error (.05) was large relative to the -.07 average, which means that the effect may not be significantly different from zero. Nonetheless, taken at the expected average effect size, and at an estimated cost of \$2,198 per participant, the economics appear positive: the taxpayer's net present value just breaks even (+\$237) and increases to \$5,048 when the crime victim perspective is included. The later net present value is equivalent to a benefit-to-cost ratio of \$3.30 of benefits per dollar of cost.

Drug Treatment Programs in Jails We were able to locate seven studies of drug treatment programs in jails. Since jail populations in Washington have grown considerably in recent years, this is an area where more research would especially be helpful. The seven studies produced an effect size of -.05 using meta-analysis. We estimate that jail programs are relatively cheap, perhaps due to the shorter stay of jail inmates. At an estimated cost of \$1,172 per participant, the economics appear positive: the taxpayer's net present value just breaks even (+\$373) and increases to \$3,361 when the crime victim perspective is included. The later net present value is equivalent to a benefit-to-cost ratio of \$3.87 of benefits per dollar of cost.

Adult Sex-Offender Treatment Programs

The Institute studied the sex offender evaluation treatment literature by separately analyzing several different five types of sex offender treatment.³⁰ These categories include:

- Cognitive-behavioral sex offender treatment
- Psychotherapeutic approaches
- Behavioral approaches
- Chemical treatment
- Surgical treatment

In Section IV, Table K, we list the citations and summarize the results of each evaluation study. For this cost-benefit review, however, we only estimated the effects and the economics of cognitive-behavioral sex offender treatment programs. This treatment modality has emerged as the principal type of sex offender treatment and most recent evaluations of sex-offender treatment has been conducted on this type of program. The cognitive-behavioral approach targets reducing deviant arousal, increasing appropriate sexual desires, improving social skills, and modifying distorted thinking. The treatment occurs both in-prison and in the community.

The Institute's review of the international research found that relatively few sex offender programs have been evaluated, and fewer still have a strong research design. Using the Institute's weighting scheme to combine the seven studies that met our minimum research design requirements, the evaluations have an average effect size of -.11 (standard error .05) for overall recidivism, and a slightly higher effect size (-.13, standard error .04) for sex crime recidivism. This difference is taken into account when the Institute calculates the costs and benefits.

We estimate that the typical cognitive-behavioral sex offender treatment program costs about \$6,246 per participant. At that price, taxpayers don't break even (-\$788 net present value per participant). There is, however, a substantial positive benefit when the crime victim perspective is included. The total estimated net present value is \$19,534 per programs participant, producing a benefit to cost ratio of \$4.13 of benefits per dollar spent on the typical program. The reason the benefits increase quickly when the crime victim perspective is included is that sex offenders tend to specialize in sex offenses,³¹ which are very costly to crime victims. Thus when sex treatment programs are successful in lowering recidivism rates, especially sex offense recidivism rates, the benefits to society increase.

Our conclusion is that the average cognitive-behavioral sex offender treatment program is cost-beneficial. That is, compared to not treating sex offenders with this approach, the typical cognitive-behavioral sex offender treatment program saves more than it costs.

³⁰ Similar groupings of sex offender programs can be found in two useful meta-analyses: Gallagher, C. A., Wilson, D. B., Hirschfield, P., Coggeshall, M. B., and MacKenie, D. L., (1999), A quantitative review of the effects of sex offender treatment on sexual re-offending, *Corrections Management Quarterly*, 3(4): 19-29. Hanson, R. K., (2000), The 2000 ATSA report on the effectiveness of treatment for sex offenders, version: April 7, 2000.

³¹ See Table IV-B.

Adult Offender Intermediate Sanctions

The Institute analyzed the effects of two types of intermediate sanctions for adult offenders: intensive supervision and boot camps. There are other types of sanctions that fall under the intermediate sanction classification, but we have yet to include the limited national research evaluating these approaches in our cost-benefit analysis.³²

Intensive Supervision Programs We found 28 evaluations of intensive supervision programs that met our minimum research design standards. For our cost-benefit analysis, we subdivided this set of studies into three types:

- Surveillance-oriented intensive supervision (19 studies)
- Treatment-oriented intensive supervision (6 studies)
- Intensive supervision as an alternative to prison (3 studies)

As indicated by these numbers, most of the evaluation work in this area has been on the surveillance-oriented intensive supervision programs where the primary focus of the approach is lower supervision caseloads for probation or parole officers. There are far fewer evaluations of programs where a primary emphasis has been on some type of treatment program or service delivery. Of the six studies we included in this category, some had a treatment focus but probably did not actually do very much treatment, at least as measured by the average cost of the programs compared to regular intensive supervision parole programs. There have been a very small number of experiments (three that we could find that also met our research design standards) using intensive supervision as an alternative to incarceration.

From our meta-analysis of these three approaches, we found a small non-significant effect size for surveillance-oriented intensive supervision (-.03), a larger effect size for treatment-oriented intensive supervision (-.10), and a zero effect size for intensive supervision as an alternative to prison. The economics of these approaches are quite different. We estimate that surveillance-oriented intensive supervision costs about \$3,296 more per offender (than regular supervision). The average treatment-oriented intensive supervision program evaluated increased this incremental cost to \$3,811 per offender (again, compared to regular supervision). When intensive supervision is used as an alternative to prison, there is an immediate, up-front cost savings since supervision in the community is cheaper than incarceration. We estimate this to be an up-front cost savings of \$5,925 per offender, although this would vary widely by the particular program.

These program cost estimates, together with the estimated effect sizes on subsequent criminal activity, determine the bottom-line estimates of costs and benefits for these programs. The economics of surveillance-oriented intensive supervision are not attractive: Taxpayers lose \$2,250 per participant and losses are still evident when the crime victims perspective is included. This means that the relatively small reduction in average recidivism

³² We have not, for example, completed cost-benefit meta-analyses of other intermediate sanctions such as electronic home monitoring, day reporting, or fines (some of the research studies in these areas, however, are listed in Table IV-K in this report).

rates (the -.03 effect size) associated with this approach do not counteract the \$3,296 increased cost of these programs, leaving the overall economic bottom line at a negative \$384 per offender, equivalent to a benefit-to-cost ratio of 88 cents of benefits per dollar of cost.

Treatment-oriented intensive supervision programs, on the other hand, apparently do produce positive economic results. The expected crime reduction effect size (-.10) more than offsets the up-front increase in costs (\$3,811 per offender) leaving roughly a break-even condition for taxpayers (-\$459) and a positive overall net present value of \$5,520, equivalent to a benefit-to-cost ratio of \$2.45 of benefits per dollar of cost.

The three studies of intensive supervision as an alternative to incarceration found no average effect on recidivism rates, but the supervision was cheaper (roughly \$6,000) than incarceration. Since there was no effect on crime, the net result is a positive economic bottom line of about \$6,000 per offender from both the taxpayers and combined taxpayer-crime victim perspectives.

Adult Boot Camps We found 11 evaluations that met our research design criteria to be included in our meta-analysis of adult boot camps (see Table IV-K for a listing of the studied). The average effect size for these evaluations is zero, that is, there is, on average, no expected change in recidivism rates for the adult boot camp participants compared to those processed with regular incarceration. Boot camps are, however, cheaper than regular incarceration, on average. The degree to which they are cheaper depends on the resources that boots camps avoid. If a boot camp is a true alterative to incarceration, then we estimate the up-front savings to be \$9,725 per offender. If, however, the boot camp is used only as a partial diversion to treatment (that is, the boot camp is used for some offenders who would have otherwise not gone to prison), then the savings are less. On Table 1, we show these economics for the full prison-diversion boot camp, and for a boot camp that in practice only diverts 75 percent of the participants from prison. This 75 percent figure was found to reflect the actual experience in several typical boot camp evaluations.³³ With no apparent effect of subsequent recidivism rates, the bottom line economics simply measure the degree to which the camps are cheaper than regular incarceration. The range of net benefits appear to be somewhere between \$10,000 per boot camp participant for a true diversion from prison to \$3,500 of net benefit for a partial diversion from prison.

Cognitive Behavioral Programs

The Institute studied the evaluation research on two specific cognitive-behavioral programs, Moral Reconation Therapy, and Reasoning and Rehabilitation. Moral Reconation Therapy (MRT) is a cognitive-behavioral program designed for treatment-resistant populations. The program involves a step-by-step process designed to raise offenders from low to high levels of moral development in order to reduce the chances of subsequent criminal behavior.

³³ See, for example, MacKenzie, D. L., and Piquero, A., (1994). The impact of shock incarceration programs on prison crowding. *Crime & Delinquency*, 40(2): 222-249.

Reasoning and Rehabilitation (R&R) is a program designed to teach social-cognitive skills to offenders. It is based on the premise that offenders lack the cognitive skills and attitudes essential for social competence and that acquiring such skills will better enable them to achieve success in legitimate pursuits and withstand pressures toward criminal behavior. The central goals are to modify offenders' impulsive, rigid, and illogical thinking patterns in favor of thought before action and consideration of behavioral consequences. Since MRT and R&R are both conducted by correctional staff in group settings, the cost per participant is low, about \$300 per offender. We analyzed the eight studies of MRT and the six studies of R&R that met our minimum research standards and found similar effect sizes of -.08 and -.07. These effect sizes, coupled with the low cost of the programs, produce attractive and similar economic bottom lines of about \$2,400 in net taxpayer-only benefits per participant and about \$7,500 in net benefits per participant when the crime victim perspective is added.

Other Adult Offender Program Types

In our cost-benefit review, we include five other types of programs that have been tried and evaluated for adult offenders.

- Work-release programs
- Job counseling/search for inmates leaving prison
- In-prison adult basic education
- In-prison vocational education
- Correctional industries programs

Work Release Programs Work release programs permit selected prisoners (or, in some cases, jail inmates) nearing the end of their terms to work in the community, returning to prison or community residential facilities for the non-working hours. The programs are designed to prepare inmates to return to the community in a relatively controlled environment. Work release also allows inmates to earn income, reimburse the state for part of their confinement, build up savings for their eventual release, and acquire more positive living habits.

We only identified two studies of work release programs, one of which evaluated Washington's program. The average effect size for the two programs is -.03, but the variation is wide (standard error .11) so the difference is clearly not significantly different than zero. The Washington study also conducted a cost analysis and found that the work release group cost, on average, \$456 more per offender than those not exiting prison through the work release facility—a non-significant finding. With such a small incremental cost, if a work release program can reliably achieve even a -.03 effect size on recidivism, then our analysis indicates that the program would roughly break even with taxpayers (+\$507 net present value) and would be attractive from the combined taxpayer-crime victim perspective, earning a net present value of \$2,351 per participant, equivalent to a benefit-to-cost ratio of \$6.16 of benefits per dollar of cost.

Job Counseling & Job Search for Inmates Leaving Prison Efforts to improve the labor market performance of ex-offenders are based on the theory that employed ex-offenders are less likely to commit new crimes. One class of programs focuses on job search and employment counseling. In general, these programs attempt to link offenders with certain marketable skills to specific employers. The Institute found evaluations of six programs where a primary component was job search and counseling.

Overall, using the Institute's meta-analysis procedures, the six evaluations have an average effect size of about -.04 for basic recidivism. The typical programs are fairly cheap, costing an estimated \$772 per participant. Given these assumptions, taxpayers gain approximately \$625 in subsequent criminal justice costs for each program participant. Adding the crime victim's perspective increases the net present value to \$3,300 per participant, equivalent to a benefit-to-cost ratio of \$5.28 of benefits per dollar of cost.

Adult Basic Education A premise of adult basic education is that many inmates lack basic abilities in reading, writing, and mathematics and if these skills are increased, offenders may have a better chance of avoiding criminal behavior when released from prison.

The Institute's review of the national research found that this hypotheses has not been extensively or rigorously evaluated. Only three evaluations met the Institute's minimum research quality standards. From these few studies, however, we found a significant effect size of about -.11 for recidivism. The average cost per participant in Washington's program is \$1,972. We estimate the bottom line to taxpayers to be \$1,852 to taxpayers and \$9,176 including the perspective of crime victims. The later figure is equivalent to a benefit-to-cost ratio of \$5.65 of benefits per dollar of cost.

In-Prison Vocational Education Many adult offenders in the criminal justice system have poor job market skills and records. Vocational education for inmates is intended to improve the likelihood of post-prison employment and thereby decrease the chance of subsequent criminal activity. Vocational education can include, for example, improving work-related math skills for the automotive or construction trades. Some programs offer in-prison apprenticeships and an accreditation element that can make it easier for offenders to obtain trade licenses.

The Institute's review of the evaluation research found very few published studies that have measured the effect of this strategy on criminal recidivism. Moreover, most studies used fairly weak research designs, making it difficult to generalize the findings. However, of the two evaluations that met minimum research quality standards, the Institute found a significant effect size of about -.13 for recidivism. Based on the Institute's estimates, a typical average cost per participant for Washington's vocational education program is \$1,960. Overall, taxpayers gain approximately \$2,835 in subsequent criminal justice costs for each program participant. Counting the crime victim's benefits increases the expected net present value to \$12,017 for each program participant, for a combined taxpayer and crime victim benefit of \$7.13 for every dollar spent.

Correctional Industries We found only three well-designed studies that have examined the effect that correctional industry programs have on criminal recidivism. From these three studies we found a significant effect size of -.08 for basic recidivism. We calculate a cost of a correctional industries program to be about \$1,800 per participant, although this figure is quite rough since it is difficult to cost out these programs and the individual evaluations did not quantify program costs. With these parameters, the bottom-line economics for these programs appear attractive, producing net present values of \$1,147 and \$9,413 from the taxpayer and combine taxpayer-crime victim perspectives, respectively. The cost-benefit ratio associated with the last figure is equivalent to \$6.23 of benefits per dollar of cost.

SECTION III: Technical Description of the Model

This section describes the details and results of the analytical model developed by the Washington State Institute for Public Policy to estimate the costs and benefits of prevention and intervention programs. This report is a snapshot of the Institute's model as of May 2001. The analytical effort described here is a "work in progress" and new information is regularly added to improve the Institute's estimates of the costs and benefits. Several refinements and extensions of the current model are planned for 2001-02 and are discussed briefly.

The Institute's approach to producing estimates of costs and benefits involves five basic steps, each of which is described in this Section.

- **Step 1: What works—and what doesn't—to lower crime?** To calculate the "research proven" effect (or lack of effect) that programs have in reducing crime, the Institute uses standard quantitative procedures to review the empirical evidence from outcome evaluations. Our review employs meta-analytic techniques to produce estimates of the "effect sizes" of different types of programs. Effect sizes are statistical summaries indicating the degree to which a program has been shown to change the frequency, type, and timing of an outcome, in this case, criminal behavior. The Institute makes several adjustments to these effect sizes to reflect the quality of the research design that produced the evaluation evidence; the sample size in a study; whether the treatment group in an evaluation included program completers and dropouts; whether an evaluation used multivariate analysis to estimate program effects; and whether an evaluation was performed on a "real world" program.
- **Step 2: What long-run information is known about populations to which a program could be applied?** Program evaluations typically have relatively short follow-up periods—often just one or two years—over which effects are evaluated. The goal of the Institute's cost-benefit analysis, however, is to ascertain the *long-run* costs and benefits of different program and policy alternatives. Fortunately, additional information is available that can be used to provide reasonable estimates of the long-run costs and benefits of programs. In particular, long-run recidivism studies produce valuable information about the quantity, type, and timing of future criminality of offenders to which alternative programs might be applied. This information can be used in conjunction with the results of the analysis in Step 1 to improve estimates of the long-run effects that programs can be expected to have on future criminality.
- **Step 3: What is the value to taxpayers and crime victims of reducing crime by one unit?** The product of Steps 1 and 2 is an estimate of the number of crimes that can be avoided with a program or policy over a long-run time frame. Step 3 estimates the value to taxpayers and crime victims of avoiding an additional unit of crime. The cost of crime to taxpayers is estimated by modeling the marginal operating and capital costs of Washington's state and local government criminal justice system, and the way in which juvenile and adult criminal cases are processed in Washington. The costs incurred by crime victims are obtained from national sources.

- **Step 4: What do different approaches cost?** A cost-benefit analysis requires information about the cost of implementing policies or providing program services. For each program or policy, these costs are estimated.
- **Step 5: What are the comparative costs and benefits of programs?** The first four steps are then combined to produce standard economic statistics that describe the relative costs and benefits of different approaches available to policy makers in Washington. The estimated annual flows of costs and benefits are summarized as net present values, benefit/cost ratios, and internal rates of return. At this stage, an analysis of the sensitivity of key estimates and assumptions is also performed. The bottom line is an estimate of the expected rate of return of different options and the relative risk of those returns.

The model is a spreadsheet-based application that runs in Microsoft Excel 2000[®] with Visual Basic for Applications. The sensitivity analysis, which employs a Monte Carlo simulation technique, uses Palisade's @RISK[®] software.

Section III of this report discusses each of the five steps in detail. The tables presented in Section IV represent the current set of inputs and outputs of the overall model; these tables are referred to in the five Steps discussed in this section. Additionally, in Step 5, the entire set of cost-benefit calculations are demonstrated for one particular program.

Step 1 of 5: What Works—and What Doesn't—To Lower Crime? A meta-analysis of the effect that programs have on reducing crime.

The purpose of the Institute's model is to estimate the comparative costs and benefits of different programs and policies that try to affect the crime rate. The first step in the overall modeling effort provides a quantitative estimate of the degree to which a program or policy can be expected to influence outcomes. The Institute uses standard meta-analytic methods to obtain these estimates. Information is gathered from available program evaluations; adjustments are made to account for the quality of an evaluation's research design, its sample size, and the whether the evaluation was conducted on a "real world" program; and effect sizes are calculated for program- and policy-relevant program evaluation findings.

Step 1.1 Obtaining Program Evaluation Information The Institute gathers program evaluations from a wide variety of sources. The Institute locates studies that are published in peer-reviewed journals as well as other studies not published in journals. The later group includes studies from government or private agency sources. The citations reported in other narrative and meta-analytic reviews help in locating many studies. The Internet has been an increasingly valuable tool in searching for and retrieving evaluations of programs, especially as more research organizations post their findings on the web.

To date, the Institute has concentrated its review of the outcome evaluation literature on the following areas:

- Early Childhood Programs,
- Middle Childhood and Adolescent (Non-Juvenile Offender) Programs,
- Juvenile Offender Programs, and
- Adult Offender Programs.

Within each of these broad areas, the Institute organizes individual evaluations into policy-relevant topics, such as early childhood education programs, adult drug courts, cognitive-behavioral programs for juvenile sex offenders, and so on. Some meta-analytic groupings are for very specific "off-the shelf" programs such as those identified as "Blueprint" programs by the University of Colorado's Center for the Study and Prevention of Violence.³⁴

While we believe our current review covers a substantial portion of the existing evaluation research in these five areas, it is likely that we have missed some studies. We built this literature review, however, so that as new evaluations are completed, or as previous studies are discovered, the cost-benefit review can be quickly updated. Thus, the "program inventory" in this report provides an expandable base of evaluation information to assist Washington State policy makers and program designers.

At present, the Institute's review does not include the full range of criminal justice topics. We omit, for example, research on the effectiveness of policing levels and deployment strategies and the effect of deterrence and incapacitation in sentencing policies. As more research is undertaken both in Washington and elsewhere, our cost-benefit analysis can be extended to encompass these and other areas of interest to policy makers.

³⁴ <http://www.colorado.edu/cspv/>

Currently, our review concentrates on evaluations that measure a program's effects on criminality. Many programs have additional or alternative goals. For example, the primary goals of some prevention programs are to reduce teen pregnancy, substance abuse, or dropping out of school. The principal goal of some adult offender programs is to maintain in-prison control of inmates. Although society, program participants, and taxpayers can benefit from changes in these and other behaviors, at present the Institute's analysis is restricted to measuring the costs and benefits of crime-related outcomes. Future work is planned to estimate non-crime related benefits.

Step 1.2 Coding Information from Program Evaluations Once copies of studies are obtained, the Institute records in a database key information from each evaluation. When the Institute reviews an evaluation, four types of information on a program's effectiveness in reducing crime are recorded. Relative to a control or comparison group:

1. Did the program affect the percent of the population that offended or re-offended?
2. Of those that offended or re-offended, did the program change the average number of offenses?
3. Did the program affect the types (i.e. the seriousness) of offenses of those that offended or re-offended?
4. Of those that offended or re-offended, did the program change the timing of the offenses?

Almost all of the evaluations we have reviewed analyze and record information on the first of these four effects. Far fewer evaluations report information on the second effect. Still fewer evaluations report information on the third effect and almost no evaluations study or report findings on the fourth effect.

An array of information is coded by the Institute for each study, including:

- A citation and a general description of the program.
- A rating for the strength of the research design (see step 1.5).
- The type(s) of recidivism or crime rate outcome measured in the evaluation. These may include, for example, arrests, convictions, returns to prison, or self reported crime. In general, the Institute prefers officially recorded measures of criminal activity whenever they are reported, although the model can estimate the costs and benefits of crime measures obtained with self-reported surveys.
- The length of the follow-up period in the evaluation. If a study reports several different follow-up periods, the longest period is used to summarize a study.
- The per participant program cost of program participants or comparison or control group participants and the year in which the dollars are denominated (see Step 4), if reported.
- The number of participants in the program and comparison or control group.
- The simple yes/no recidivism or crime rates of program and comparison or control group participants, if reported.
- The mean number of offenses per program or comparison or control group participants, and associated standard deviations, if reported.

Possible Adjustments to the Coding of Crime Effects for Each Study For each of the two main outcomes noted above (i.e. the bivariate and mean-level outcomes), three adjustments are made, if necessary, to the information provided in each study:

1. **Adjustment: combining results for program completers and dropouts.** The outcomes of many treatment-comparison group evaluations report results for two groups: those that received the full dose or at least some amount of treatment, and those in the comparison group that received no treatment. Depending on how well the comparison group matches the treatment group (see Step 1.5, below), the results of these evaluations can be directly compared. Other evaluations, however, report the recidivism rates of three groups: program completers, program dropouts, and a comparison group. Still other studies only report outcomes for program completers versus the comparison group. We believe that the differences in these three types of evaluations must be standardized in order to synthesize the results. If this standardization is not done, self-selection bias is very likely to be introduced, since program completion probably measures other motivational factors that cannot be measured in a comparison of typical pre-existing variables. Therefore, in coding the results of individual outcome evaluations, the Institute always combines the results for program completers and dropouts, and then compares this combined treatment group against the comparison group. For example, if a study reports that 50 members of the treatment group completed the program and had a recidivism rate of 30 percent and 50 members of the treatment group dropped out of the program and had a recidivism rate of 40 percent, then the Institute would record the weighted average recidivism rate for the entire treatment group (35%) and compare that number to the comparison or control group's reported recidivism rate. If the numbers are not reported in the study to allow this combination of program completers and dropouts, then the study is rated a level "2" study, as explained in Step 1.5 of this report.
2. **Adjustment: multivariate results.** Many outcome evaluations simply report the results for a treatment and comparison group without making adjustments for any differences between the two groups. If, however, an evaluation conducts a multivariate analysis of the outcomes (e.g. logistic regression of bivariate results or ordinary least squares regression of mean values) to adjust for any differences in pre-existing variables between the treatment and control groups, then the Institute records those multivariate-adjusted numbers rather than the "raw" results. For those studies that do report multivariate results, if the study reports the mean values of the independent variables used in the multivariate analysis, then the estimated recidivism or crime rates are taken at the mean values applied to the coefficients in the multivariate analysis. If the mean values are not recorded for those variables, then the reported regression coefficient (e.g. an odds ratio or a beta coefficient) is used to express the program group's recidivism rate as a function of the reported comparison group's unadjusted recidivism rate.
3. **Adjustment: Follow-up time standardization.** In comparing the outcomes between the program and comparison groups, some evaluations indicate that the

follow-up times are non-equivalent. When this is encountered, the Institute adjusts the follow-up time of one of the groups to match that of the other group. A simple, yet conservative, assumption is made in calculating this adjustment. For example, suppose an evaluation reports that the recidivism rate for a program group is 30 percent during an 18-month follow-up period and 45 percent for a comparison group over a 20-month period. If no other information is reported in the evaluation, the Institute assumes linearity by dividing .30 by 18 months and multiplying that quotient by the difference in the number of months in the follow up times of the two groups. In this example the adjusted recidivism rate of the program group would be increased to 33 percent [$.33 = (.30/18)*(20-18) + .30$] instead of the reported 30 percent. This adjustment is probably conservative because most recidivism curves are not linear but increase steeply at first and then begin to level off. Lacking other information about the shape of the recidivism curves, however, the Institute believes that it is more accurate to make even a simple adjustment for unequal follow-up times than to assume that the different follow up times have zero effect on outcomes.

Step 1.3 Calculating Effect Sizes Effect sizes—that is, the degree to which a program has been shown to change the criminality of program participants—are calculated for each program. There are several methods used by meta-analysts to calculate effect sizes, as described in Lipsey and Wilson (2000).³⁵ The Institute uses the following standard statistical procedures to calculate the *mean difference effect sizes* of programs.

For dichotomous outcomes such as the simple percentage difference in recidivism rates between a treatment and control or comparison group, Lipsey and Wilson (2000) show that the mean difference effect size calculation can be approximated using the arcsine transformation of the difference between proportions.³⁶

$$(1) \quad ES_{m(p)} = 2 * \arcsin \sqrt{P_e} - 2 * \arcsin \sqrt{P_c}$$

In this formula, $ES_{m(p)}$ is the estimated effect size for the difference between proportions from the research information; P_e is the percentage of the population that offended (or re-offended) for the experimental or treatment group; and P_c is the percentage of the population that offended (or re-offended) for the control or comparison group. Most program evaluations *only* report the information necessary to calculate the effect size in equation (1). As described earlier, the percentages used (P_e and P_c) to calculate the effect size reflect any adjustments made by the Institute to account for the combination of results for program completers and dropouts, the use of any reported multivariate results, and any adjustments for unequal follow up periods.

A second effect size calculation involves the differences in the mean number of offenses for *those who offend (or re-offend)*. While the first effect size simply divides offenders and non-offenders, the second effect size measures the effect, if any, that a program has in lowering the average number of offenses of *those that offend*. Many program evaluations fail to

³⁵ Lipsey, M., W. & Wilson, D., B. (2000), *Practical Meta-Analysis*. Thousand Oaks: Sage Publications. There are three principal choices for calculating effects sizes—the standardized mean difference effect size, the odds ratio effect size, and the correlation coefficient effect size—and each of these three metrics can be converted into the others with appropriate transformations.

³⁶ *Ibid.*, Table B10, formula (22).

analyze or report this information. When an evaluation does report the necessary information for this second effect size calculation, the Institute uses the procedure for the difference between means.³⁷

$$(2) \quad ES_m = \frac{M_e - M_c}{\sqrt{\frac{SD_e^2 + SD_c^2}{2}}}$$

In this formula, ES_m is the estimated effect size for the difference between means from the research information; M_e is the mean number of offenses for those who offend (or re-offend) for the experimental group; M_c is the mean number of offenses for those who offend (or re-offend) for the control group; SD_e is the standard deviation of the mean number of offenses for those who offend (or re-offend) for the experimental group; and SD_c is the standard deviation of the mean number of offenses for those who offend (or re-offend) for the control group.

Often, research studies report the mean values needed to compute ES_m in (2), but they fail to report the standard deviations. Sometimes, however, the research will report information about statistical tests that can then allow the pooled standard deviation to be estimated. These procedures are also described in Lipsey & Wilson (2000). The Institute uses these procedures whenever possible to aid in calculating the effect sizes.

Step 1.4 Adjusting Effect Sizes for Small Sample Sizes The raw effect sizes are then adjusted for small sample sizes. Small sample sizes have been shown to upwardly bias effect sizes, especially when samples are less than 20. Following Hedges (1981),³⁸ Lipsey & Wilson(2000)³⁹ report the "Hedges correction factor", which is used by the Institute to adjust all mean difference effect sizes (N is the total sample size of the combined treatment and comparison groups):

$$(3) \quad ES'_m = \left[1 - \frac{3}{4N - 9} \right] * [ES_m, \text{or}, ES_{m(p)}]$$

Step 1.5 Adjusting Effect Sizes for Research Quality Not all research is of equal quality and this, we believe, greatly influences the confidence that can be placed in the results from a study. Some studies are well designed and implemented and the results can be viewed as accurate representations of whether the program itself worked. Other studies are not designed as well and less confidence can be placed in any reported differences. In particular, studies of inferior research design cannot completely control for sample selection bias or other threats to the validity of reported research results. This does not mean that results from these studies are useless, but it does mean that less confidence can be placed in any cause-and-effect conclusions drawn from the reported study results.

To account for the difference in the quality of different research designs; the Institute uses a 5-point scale as a way to adjust the reported results. The scale is based closely on the 5-

³⁷ *Ibid.*, Table B10, formula (1).

³⁸ Hedges, L. V. (1981). Distribution theory for Glass's estimator of effect size and related estimators. *Journal of Educational Statistics*, 6, 107-128.

³⁹ Lipsey, M., W. & Wilson, D., B. (2000). *Practical Meta-Analysis*. Thousand Oaks: Sage Publications, page 49, formula 3.22.

point scale developed by researchers at the University of Maryland.⁴⁰ On this five-point scale, a rating of "5" reflects an evaluation in which the most confidence can be placed. As the evaluation ranking gets lower, less confidence can be placed in any reported differences (or lack of differences) between the program and comparison or control groups.

On the five-point scale as interpreted by the Institute, each study is rated with the following numerical ratings.

- A "5" is assigned to an evaluation with well-implemented random assignment of subjects to a treatment group and a control group that does not receive the treatment/program. A good random assignment study should also indicate how well the random assignment actually occurred by reporting values for pre-existing characteristics for the program and control groups.
- A "4" is assigned to a study that employs a quasi-experimental research design with a program and matched comparison group, controlling with statistical methods for self-selection bias that might otherwise influence outcomes. These methods may include an instrumental variables or Heckman approach to modeling self-selection.⁴¹ A level 4 study may also be used to represent an experimental random assignment design that had problems in implementation, perhaps with significant attrition rates.
- A "3" indicates an evaluation where the program and comparison groups were matched for pre-existing differences in key variables. There must be evidence presented in the evaluation that indicates few, if any, significant differences in these variables. Alternatively, if an evaluation employs statistical techniques (e.g. logistic regression) to control for pre-existing differences, and if the analysis is successfully completed, then a study with some differences in matched pre-existing variables can qualify as a level 3 study.
- A "2" involves a program and matched comparison group where the two groups lack comparability on pre-existing variables and no attempt to control for these differences was reported in the study.
- A "1" involves a study where no comparison group is utilized. Instead, the relationship between a program and an outcome, i.e., recidivism, is analyzed before and after the program.

The Institute does not use the results from program evaluations rated as a "1" on this scale, because they do not include a comparison group and thus there is no context to judge program effectiveness. We also regard evaluations with a rating of "2" as highly problematic; we do not consider their findings in the calculations of effect sizes in our cost-benefit calculations. In the listing of program evaluations reviewed by the Institute in Section IV of this report, all studies with a less-than level "3" rating are listed as "LT3" and are not used in subsequent analyses. They are listed on the table for informational purposes only.

⁴⁰ Sherman, L., Gottfredson, D., MacKenzie, D., Eck, J., Reuter, P., Bushway, S., (1997), *Preventing Crime, What Works, What Doesn't, What's Promising*, Washington: U.S. Department of Justice, Chapter 2.

⁴¹ For a discussion of these methods, see: Rhodes, W., Pelissier, B., Gaes, G., Saylor, W., Camp, S., Wallace, S., (2000).

"Alternative Solutions to the Problem of Selection Bias in an Evaluation of Federal Residential Drug Treatment Programs," Federal Bureau of Prisons, Office of Research and Evaluation.

An explicit adjustment factor is assigned to the results of individual effect sizes based on the Institute's judgment concerning research design quality. We believe this adjustment is critical and is the only practical way to combine the results of a high quality study (e.g. a level "5" study) with those of lesser design quality. This adjustment means that, everything else being equal, a level 5 study has more influence on the overall effect size for a given area than does a level 3 or 4 study. The following adjustments are used by the Institute to account for studies of different research design quality:

- A level 5 study carries a factor of 1.0 (that is, there is no discounting of the study's evaluation outcomes).
- A level 4 study carries a factor of .75 (that is, we discount effect sizes by 25 percent).
- A level 3 study carries a factor of .50 (that is, we discount effect sizes by 50 percent).
- A level 2 study carries a factor of .00 (that is, we discount effect sizes by 100 percent).
- A level 1 study carries a factor of .00 (that is, we discount effect sizes by 100 percent).

Studies with a level 1 or 2 rating are not used in the cost-benefit analyses; hence their weights are zero. A study with a level 3 rating carries half the weight of a level 5 study and a level 4 study has three-quarters of the weight. These factors are subjective; they are based on the Institute's general impressions of the confidence that can be placed in the predictive power of studies of different quality. It might be possible to undertake a meta-analysis to refine, in a more empirical fashion, the relative effect that research quality has on recidivism outcomes. We have not undertaken that research and, in the meantime, the factors listed are our best estimates on how to sum the results of studies of differing research quality.

The effect of the adjustment described in Step 1.5 is to multiply the effect size, ES'_m , in equation (3) by the appropriate research design factor listed above. For example, if a study has an effect size of -.2 and it is deemed a Level 4 study, then the -.2 effect size would be multiplied by .75 to produce a -.15 adjusted effect size for use in the subsequent steps of the meta-analysis. The Institute's judgment about research design quality for each study reviewed is listed in Section IV to this report.

Step 1.6 Adjusting Effect Sizes for Evaluations of "Non-Real World" Programs

The purpose of the Institute's work is to identify and evaluate programs that can make cost-beneficial improvements to Washington's actual service delivery system. There is some evidence that programs that are closely controlled by researchers or program developers have better results than those that operate in "real world" administrative structures.⁴² Therefore, the Institute makes an adjustment to an effect size, ES_m , to reflect this distinction. As a parameter for all studies deemed not to be "real world" trials, the Institute discounts ES'_m , as defined by equation (3), by 25 percent. The Institute's judgment about this adjustment for each study reviewed is listed in Section IV to this report.

Step 1.7 Computing Weighted Average Effect Sizes, Confidence Intervals, and Homogeneity Tests

Once effect sizes are calculated for each program effect, the individual measures are summed to produce a weighted average effect size for a program

⁴² Presentation by Mark Lipsey at the American Society for Criminology annual meetings, San Francisco, November, 2000.

area. The Institute calculates the inverse variance weight for each program effect and these weights are used to compute the average. These calculations involve three steps. First, the standard error, SE_m of each mean effect size is computed with:⁴³

$$(4) \quad SE_m = \sqrt{\frac{n_e + n_c}{n_e n_c} + \frac{(ES'_m)^2}{2(n_e + n_c)}}$$

In equation (4), n_e and n_c are the number of participants in the experimental and control groups and ES'_m is from equation (3), after the adjustments for research quality and "real world" factors are made, as described in Sections 1.5 and 1.6, respectively.

Next, the inverse variance weight w_m is computed for each mean effect size with:⁴⁴

$$(5) \quad w_m = \frac{1}{SE_m^2}$$

The weighted mean effect size for a group of studies in program area i is then computed with:⁴⁵

$$(6) \quad \overline{ES}_i = \frac{\sum (w_m i ES'_{m_i})}{\sum w_m i}$$

Confidence intervals around this mean are then computed by first calculating the standard error of the mean with:⁴⁶

$$(7) \quad SE_{\overline{ES}} = \sqrt{\frac{1}{\sum w_i}}$$

Next, the lower, ES_L , and upper limits, ES_U , of the confidence interval are computed with:⁴⁷

$$(8) \quad \overline{ES}_L = \overline{ES} - z_{(1-\alpha)} (SE_{\overline{ES}})$$

$$(9) \quad \overline{ES}_U = \overline{ES} + z_{(1-\alpha)} (SE_{\overline{ES}})$$

In equations (8) and (9), $z_{(1-\alpha)}$ is the critical value for the z-distribution (1.96 for $\alpha = .05$).

The test for homogeneity, which provides a measure of the dispersion of the effect sizes around their mean, is given by:⁴⁸

$$(10) \quad Q_i = (\sum w_i ES_i^2) - \frac{(\sum w_i ES_i)^2}{\sum w_i}$$

The Q test is distributed as a chi-square with $k-1$ degrees of freedom (where k is the number of effect sizes).

⁴³ Lipsey, M., W. & Wilson, D., B. (2000), *Practical Meta-Analysis*. Thousand Oaks: Sage Publications, page 49, equation 3.23.

⁴⁴ *Ibid.*, page 49, equation 3.24.

⁴⁵ *Ibid.*, page 114.

⁴⁶ *Ibid.*, page 114.

⁴⁷ *Ibid.*, page 114.

⁴⁸ *Ibid.*, page 116.

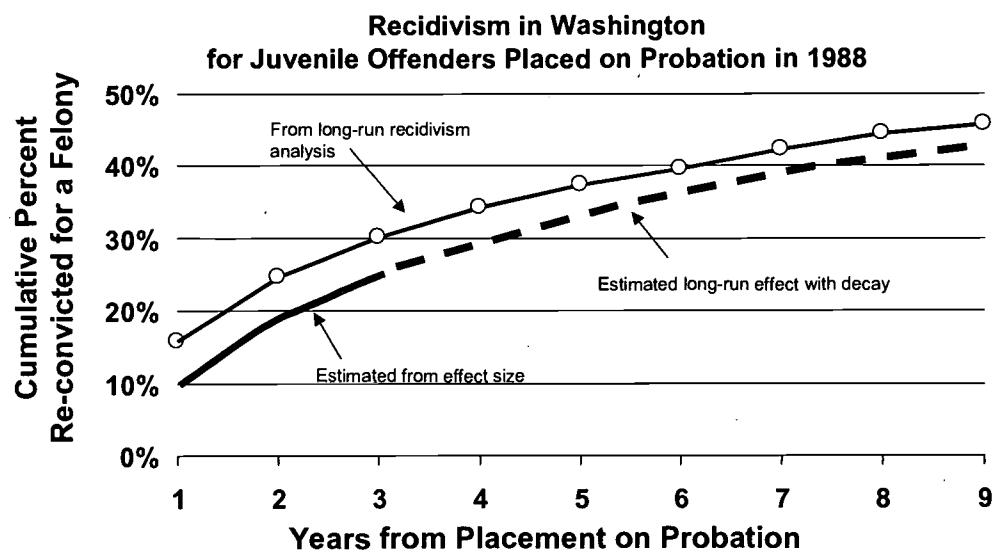
The results of the Institute's meta-analysis are shown in Section IV on Table VI-A. Information on the individual studies summarized by this meta-analysis, for each program area i , is also included in Section IV.

Step 2 of 5: Estimates of Long-run Patterns of Criminality

Program evaluations typically have relatively short follow-up periods—often just one or two years—over which effects are evaluated. The goal of cost-benefit analysis, however, is to estimate long-run costs and benefits of different alternatives. When prisons are built, for example, long-run capital costs are committed based on a forecasted need for those resources. In a similar manner, the decision to spend money today on an intervention program usually presumes that benefits will be reaped for some number of years into the future. The analytical problem is how to extend the short-run effect sizes from program evaluations to include a reasonable estimate of future benefits.

As a result of other research efforts, additional information can be used to aid in estimating the long-run costs and benefits of programs. For example, long-run recidivism studies produce valuable information about the quantity, type, and timing of future criminality of different groups of juvenile or adult offenders. The results from these longitudinal studies, in conjunction with the effect size information from Step 1, can be used to improve estimates of the effects that programs can be expected to have on future criminality.

The Institute has produced estimates of long-term criminal offense rates for different populations. These rates reflect the Institute's best estimate of the long-term criminal behavior of different populations to which a particular program might be applied. An illustration of this is reflected in the following chart. The top line illustrates the nine-year recidivism rates (measured by felony re-convictions) of juvenile offenders placed on probation caseloads in Washington in 1988. Nine years after placement, about 46 percent had been re-convicted for another felony, either as a juvenile or as an adult, in Washington. These estimates were calculated from a study conducted by the Institute. The lower solid black line is an illustrative finding of how that recidivism curve is expected to be lower if a program is able to achieve a certain effect size. The degree to which that curve would be lower is estimated with the effect size procedures discussed in the previous section of this report. Since most evaluations only include a follow-up period of one or two years, the lower line is solid only for that period of time. It would be unreasonable, however, to



assume that there are no benefits beyond that period. That is, if there is an observed reduction in recidivism at the end of the evaluation period, there will probably be at least some further benefits in the future. The cost-benefit model provides a means, described later in this report, to estimate a long-run effect, illustrated on the chart by the dashed line.

There are several sources of information for estimating these long-run recidivism rates—the solid top line on the chart. For many programs targeted at juvenile or adult offenders, the Institute's estimates are calculated from multi-year recidivism studies of different populations in Washington. For example, the rates for adult offender populations are based on an analysis the Institute conducted of how often different types of offenders committed to the Washington Department of Corrections are re-convicted for new felony offenses in Washington. For the adult corrections population, the Institute's recidivism analysis tracked, for eight years, the entire cohort of those released from prison or placed on community supervision in 1990. The Institute has calculated similar recidivism statistics for different types of juvenile offender populations in Washington. For the juvenile offender estimates, recidivism is tracked both while the juvenile is still a juvenile and when the juvenile might re-offend as an adult. Key statistics from these studies are recorded on Table IB-B in Section IV of this report.

From these longitudinal studies, the Institute calculates four types of information about recidivism that correspond to the four effect sizes discussed in Section 1.2. The first is a simple bivariate split between those that re-offend, and those that do not. The second type of information is the average number of re-convictions of those who do re-offend. The third is a distribution on the type of crimes committed by the re-offenders. The Institute uses six categories of felonies in its cost-benefit model: homicide, sex offenses, robbery, aggravated assault, property offenses, and drug offenses.⁴⁹ The fourth type of recidivism information is the timing of the re-offenses over the multi-year follow-up period.

On Tables IV-B, three of the four recidivism measures from the Institute's analyses are shown: the percent that re-offend (listed on the tables as the "Basic Recidivism Rate"), the average number of offenses of the re-offenders and all of those in the cohort (along with corresponding standard deviations), and the type of felony offenses for which re-offenders were convicted during the follow-up period.⁵⁰

⁴⁹ These six categories of felony crime are the major crime categories used by the Washington Office of Financial Management.

⁵⁰ The other recidivism parameter (the timing of the re-offenses) is used directly in the model to determine the value of lowering crime by one unit (see Section 3.26).

Step 3 of 5: Estimating the Value to Taxpayers and Crime Victims of Reducing Crime by One Unit

The product of Steps 1 and 2 is an estimate of the number of crimes that can be avoided with a program over a long-run time frame. In Step 3, estimates are made of the value to taxpayers and crime victims of avoiding an additional "unit" of crime. As will be discussed, those units are specified in the model to be crimes, arrests, or convictions. This section describes the computational routines used to estimate those values.

Step 3.1 Setting General Model Parameters The Institute's cost benefit model uses a few general parameters. These model inputs are shown in Section IV on Table IV-C. The first parameter is the year into which all dollar-denominated inputs are based. Typically, a year is chosen close to the current year. On Table A1, the base year is set to 2000.

Table IV-C also contains information on the general price index used in the model to convert all dollar values into the base year chosen for the analysis. The Institute uses the Implicit Price Deflator for Personal Consumption Expenditures (IPD), although other price indices could be used. The IPD is convenient to use for analyses in Washington because it is forecast regularly by the Washington State Office of the Forecast Council, the official economic forecasting agency for Washington State government. When an input to the model is denominated in another year's dollars, the model converts it to base year dollars.

Table IV-C contains three other model parameters: the assumed real discount rate, the assumed future general inflation rate, and the assumed nominal rate of tax-exempt capital financing. The model is designed so that the user can specify whether the analysis will be expressed in "nominal" or "real" terms. If "nominal" analysis is selected, a nominal rate of discount is calculated based on the user-supplied real discount rate and the assumed future general inflation rate. All future annual costs in the model are then escalated at the assumed rate of general inflation (plus any user-supplied real escalation rate, as shown on Table IV-D, for any particular resource), and then discounted by the nominal discount rate. If a "real" analysis is selected, only real escalation rates, if any, are applied to individual cost inputs and then the real discount rate is used to calculate present values. Whichever type of analysis is chosen, the cost-benefit analysis produces the same result.⁵¹

The most important user-supplied input on Table IV-C is the annual real discount rate. This is the factor that reduces all future annual values in the model to present value. As used in this analysis, the real discount rate represents the relative general preference for owning or consuming a resource today versus owning or consuming the resource in the future. There are several competing theories about the choice of a discount rate for use in cost-benefit analyses.⁵²

⁵¹ The model's ability to work in either nominal or real terms is for the convenience of the user; some analysts feel more comfortable working and reporting information in one mode or the other. There is no difference in the overall results of the analysis.

⁵² For a discussion of these issues, see Boardman, A.E., Greenberg, D.H., Vining, A.R., & Weimer, D.L. (1996). *Cost-Benefit Analysis: Concepts and Practice*, New Jersey: Prentice Hall, Chapter 5. See also, Brent, R.J., (1996), *Applied Cost-Benefit Analysis*, Cheltenham, UK: Edward Elgar, Chapter 11.

Step 3.2 Estimating the Value of One Criminal Offense What is it worth to reduce a criminal offense? This is a central question in the Institute's cost-benefit model. The Institute approaches the question from two perspectives. First, there is a value to taxpayers if a criminal offense can be avoided. Second, there is a value to crime victims each time a criminal offense can be reduced. Unlike the market for other commodities, however, there is no convenient place to find the values of reducing crime by one unit. It is easy, for example, to find the current value of one unit of Microsoft stock; all one has to do is look in the newspaper or on the internet. There is no convenient market, however, to find the current value of reducing crime by one unit. This section of the paper describes the procedures used in the Institute's cost-benefit model to estimate that value.

A key element in the Institute's cost-benefit model is the estimation of the costs that crime imposes on taxpayers and crime victims. If crime can be reduced with effective programs or deterrence policies, then some of these costs can be avoided. Thus, calculating reasonable values for the incremental costs of crime plays a central role in estimating the benefit side of the Institute's cost-benefit model.

The Institute's cost-benefit model estimates life-cycle costs for six major types of felony crime and fourteen types of costs incurred as a result of crime, as shown in Table III-B. These categories can be expanded or contracted to make the model more or less detailed. The fourteen types of costs estimated in the model reflect those paid by taxpayers in Washington and those incurred by crime victims. The following two sections describe these costs.

Table III-B
The Washington State Institute for Public Policy's
Cost-Benefit Model for the Criminal Justice System:
Types of Crimes and Resource Costs Analyzed

Six Types of Crime

1. Murder/Manslaughter
2. Rape/ Sex Offenses
3. Robbery
4. Aggravated Assault
5. Felony Property Crimes
6. Drug Offenses

Fourteen Types of Resource Costs Incurred

1. Police and Sheriffs' Offices
2. Superior Courts & County Prosecutors
3. Juvenile Detention, with Local Sentence
4. Juvenile Detention, with JRA Sentence
5. Juvenile Local Probation
6. Juvenile Rehabilitation, Institutions
7. Juvenile Rehabilitation, Parole
8. Adult Jail, with Local Sentence
9. Adult Jail, with Prison Sentence
10. State Community Supervision, Local Sentence
11. Department of Corrections, Institutions
12. Dept. of Corrections, Post-Prison Supervision
13. Crime Victim Monetary Costs
14. Crime Victim Quality of Life Costs

Step 3.21 Criminal Justice System Costs in Washington In the Institute's cost-benefit model, the costs of the criminal justice system paid by taxpayers are estimated for each significant part of the publicly financed system in Washington. The costs of police and sheriffs, superior courts and county prosecutors, local juvenile detention services, local adult jails, state juvenile rehabilitation and state adult corrections are estimated separately in the Institute's analysis. Operating costs are estimated for each of these criminal justice system components, and annualized capital costs are estimated for the capital-intensive sectors.

The Institute's model uses estimates of *marginal* operating and capital costs of the criminal justice system. Marginal costs describe how the total cost of an operation changes as the unit of activity changes by a small amount. Marginal costs are different from average, or accounting, costs. Average costs are derived by simply dividing total costs by total workload in a given period of time. Some of those costs, however, are fixed and do not change when workload changes. Marginal costs reflect only those costs that go up or down as workload changes. Marginal costs are usually a better measure of these values than are average costs.⁵³

The Institute's model defines marginal costs as those costs that change over the period of several years as a result of changes in workload measures. Some short-run costs must be changed instantly when a workload changes. For example, when one prisoner is added to the state adult corrections system, certain variable food and service costs increase immediately, but new corrections staff are not hired the next day. Over the course of a governmental budget cycle, however, new corrections staff are likely to be hired to handle the larger average daily population of the prison. In the Institute's analysis, these "longer-run" marginal costs have been estimated, rather than immediate, short-run marginal costs. These longer-run marginal costs reflect both the immediate short-run changes in expenditures, and those operating expenditures that change after governments make adjustments to staffing levels.

Table IV-D summarizes the Institute's estimates for the per-unit marginal operating costs of the criminal justice system in Washington. Per-unit marginal capital cost estimates for key parts of the criminal justice system in Washington are shown on Table IV-E. Table IV-F provides more detail on the equations developed to estimate per-unit marginal operating costs. The estimates for each component of the criminal justice system are discussed below.

Police and Sheriffs' Offices A cross-sectional regression model was estimated for the operating costs of county sheriffs' offices and local police departments in Washington. Expenditure data for each police jurisdiction (BARS code 521) was obtained from the Washington State Auditor.⁵⁴ Sub-categories excluded were Gambling enforcement (BARS 521.25) and DARE expenses (BARS 521.28). For the explanatory workload measures, two sets of data were included in the regression. Arrest data for each jurisdiction was obtained from the Washington Association of Sheriffs and Police Chiefs. The arrest data were categorized into three types: arrests for violent felonies (murder, rape, robbery, and aggravated assault), arrests for non-violent felonies, and arrests for misdemeanor offenses. The arrest data do not include traffic operations that consume a

⁵³ A few average cost figures are currently used in the model when marginal cost estimates can not be reasonably estimated.

⁵⁴ Expenditure data for several of the cost analyses used in the Institute's model were obtained from the Washington State Auditor's Office. The Auditor's Budgeting, Accounting, and Reporting System (BARS) classification of accounts was used for these analyses and the relevant BARS codes are listed in the section of the report.

significant level of resources for police departments. To capture this effect, data from the Washington Office of the Administrator for the Courts was obtained on the number of traffic infraction filings in the local jurisdictions. All of these variables were entered in a log-log regression for pooled 1994 and 1995 data. The log-log form of the model was chosen because the relationship between the independent variable and the dependent variable is linear in natural logarithms. The results of the final equation are shown on Table IV-F. All of the variables are significant and the overall fit of equation is satisfactory. The sum of the four elasticities equals .86, a level that seems reasonable (a level less than 1.0 indicates a decreasing cost industry with regard to the scale variables measured, a condition that probably exists for policing services in Washington). The variables are also highly correlated which could indicate collinearity problems. Since all of the t-statistics are greater than 2, however, and since whatever multi-collinearity that existed in the 1994 and 1995 data is likely to exist in the future, the resulting coefficients can be used to provide reasonable estimates of marginal operating police and sheriff costs.⁵⁵

Superior Courts and County Prosecutors The marginal operating costs for court processing expenses were estimated with expenditure data from the Washington State Auditor and workload data from the Washington Office of the Administrator for the Courts. A pooled cross-sectional regression analysis was performed on 1994 and 1995 data. The units of observation were the counties in Washington. Superior Court and Prosecutor expenses were regressed against four factors: the number of felony convictions for homicide; the sum of the number of convictions for robbery, sex offenses, and aggravated assault; the number of convictions for non-violent felonies; and the number on non-criminal superior court filings. These four factors appear to be reasonable proxies for the work activity of the courts. These estimates cover both juvenile and adult court processes.

The expense data from the State Auditor allow the segregation of some types of Superior Court expenditures. Expenditure data for district courts (BARS code 512.40), municipal courts (BARS code 512.50, these courts do not hear the felony cases modeled in the Institute's analysis), family court fees (BARS code 512.22), and law libraries (BARS code 512.70, which are not treated, accounting wise, uniformly by counties), were excluded from total superior court expenditures. The county prosecutor expenditure data from the State Auditor for years 1994 and 1995 were adjusted to remove the costs of the civil (BARS 515.22), consumer affairs (BARS 515.60), and child support enforcement (BARS 515.80) divisions of the county prosecutor offices.

Table IV-F displays the regression results. The model was estimated in log-log form. The sum of the four elasticities equals .90, a level that seems reasonable. All of the variables are significant and the overall fit of equation is good. All dollars are expressed in 1995 dollars, using the implicit price deflator for personal consumption expenditures (see Table IV-C) to adjust the 1994 denominated dollars.

Local Adult Jails and Community Supervision In the Institute's model of the criminal justice system in Washington, two type of users of local adult jails are analyzed: those convicted felons who serve both pre-sentence and post-sentence time at the local jail, and those felons who serve pre-sentence time at local jails and post-sentence time at a state institution. The Institute

⁵⁵ See Peter Kennedy, (1992), *A Guide to Econometrics*, Third Edition, Cambridge: The MIT Press, page 181.

estimated local adult jail marginal operating costs for both of these events. From the State Auditor, local jail expenditure data for counties was collected for the years 1990 to 1995. These nominal annual dollar amounts were adjusted to 1995 dollars using the implicit price deflator for personal consumption expenditures (see Table IV-C). The Washington Association of Sheriffs and Police Chiefs collects annual data on the use of local jails in the state. The data for the expenses included all of the local jail expenditures (BARS 527) except local probation costs (BARS 527.40). The regression was estimated in log-log form.

Local Adult Jail capital costs for new beds were estimated from an analysis of the current cost estimates for a new 288 bed jail facility planned for Thurston County. Thurston County was also able to provide the Institute with a recent survey of comparative per-bed costs of other newly constructed jail facilities. The Thurston cost estimates are in line with the other recent actual experience. The cost estimates and financing assumptions are shown on Table IV-E. Total construction costs per bed were converted to an annual capital charge as shown on Table IV-E.

The annual operating costs of local community supervision of adult felons was obtained from a report published by the State of Washington Sentencing Guidelines Commission, *Criminal Justice in Washington State*, January 1995. This cost estimate represents the average, not the marginal, costs for "Level One" community supervision, custody, and placement.

Local Juvenile Detention and Supervision The marginal operating costs for local juvenile detention and community supervision services were estimated in a manner very similar to the adult jail facilities and programs. The data sources, however, are different. In Washington, there is no regular, statewide, collection of information on the use of juvenile detention facilities. To get that information, the Institute conducted a survey of all juvenile courts in Washington asking for basic information on the average daily population, length of stay, and operating costs.⁵⁶ The results of this survey were used to estimate local juvenile detention costs. The result of the cross-sectional log-log regression is shown on Table IV-F.

Local Juvenile Detention Facility capital costs for new beds were estimated from an analysis of the current cost estimates for a new 80-bed detention facility planned for Thurston County. The new Thurston County facility will also include a family court in addition to the detention facility. The estimated capital costs for that court were removed from the total project costs to better reflect detention costs only. Thurston County also had comparative per-bed costs of other newly constructed detention facilities and the Thurston cost estimates are in line with other recent actual experience. The cost and financing factors are shown on Table IV-E. Total construction costs per bed were converted to an annual capital charge, also shown on Table IV-E.

The cost of local probation for juvenile offenders was also estimated with data from the Institute's survey of local juvenile courts in Washington. The cost used in the cost-benefit model is the average cost reported from that survey, not an estimated marginal cost.

State Juvenile Rehabilitation Administration (JRA) State JRA marginal operating costs for JRA institutions were estimated with a time-series regression with data for fiscal years 1984 to

⁵⁶ Washington State Institute for Public Policy, *Washington State Juvenile Courts: Workloads and Costs*, April 1997.

1996. Data on JRA's annual institutions operating expenditures were obtained from JRA and data on institutional average daily population were also obtained from JRA. The results of this regression are shown on Table A5 IV-F.

JRA capital costs for new institutional beds were estimated from cost estimates provided by the House Appropriations Committee and JRA. The costs are estimates for construction of new facilities at an existing institution, not a new stand-alone facility. The cost and financing factors are shown on Table IV-E. Total construction costs per bed were converted to an annual capital charge also shown on Table IV-E.

The annual cost estimate for JRA parole services was taken from an analysis prepared by the Washington State Senate Ways and Means Committee in a report entitled "*Roundtable Discussion on Criminal Justice Funding Issues*," January 28, 1997. The annual costs of parole are average, not marginal, costs.

State Department of Corrections (DOC) State DOC operating costs were estimated in a similar fashion to those of JRA. A time-series regression for fiscal years 1984 to 1996 was estimated using DOC institutions operating expenses and the average daily population at the institutions. An additional variable, average daily population minus average institutional capacity was used to reflect the (generally) over-capacity conditions that are a part of typical historical operating conditions. Over the time period covered in the regression, average daily population averaged about 10 percent over capacity. When combined with the results of the equation, an annual marginal operating cost of approximately \$18,400 per ADP was obtained. Operating at capacity, rather than the historical ten percent over capacity level, would result in an annual marginal cost of about \$20,500 per ADP.

DOC capital costs for new institutional beds were estimated. The cost and financing factors are shown on Table IV-E. Capital cost estimates were drawn from a recent report by the Joint Legislative Audit and Review Committee which described the costs of a new state 1,936 bed facility currently under construction. The total construction costs per bed were converted to an annual capital charge as shown on Table IV-E.

Post-prison community supervision cost estimates were obtained via a communication with staff at the Department of Corrections. These post-prison costs are average costs, not marginal costs.

Step 3.22 Crime Victim Costs In addition to costs paid by taxpayers, many of the costs of crime are borne by victims. Some victims lose their lives. Others suffer direct, out-of-pocket, personal or property losses. Psychological consequences also occur to crime victims, including feeling less secure in society. The magnitude of victim costs is very difficult—and in some cases impossible—to quantify.

In recent years, however, national studies have taken significant steps in estimating crime victim costs. One US Department of Justice study by Miller, Cohen, and Wiersema divides crime victim costs into two types: a) *Monetary* costs which include medical and mental health care expenses, property damage and losses, and the reduction in future earnings incurred by crime victims; and b) *Quality of Life* cost estimates which place a dollar value on the pain and suffering of crime victims.⁵⁷ In that study, the quality of life victim costs are computed from jury awards for pain, suffering, and lost quality of life; for murders, the victim quality of life value is estimated from the amount people spend to reduce risks of death. The quality of life victim cost calculations are controversial for use in setting public policy.⁵⁸

In the Institute's analysis, victim costs from the Miller, Cohen, and Wiersema study are used as estimates of per-unit victim costs in Washington State. The victim cost estimates currently in the model are shown on Table IV-D. In keeping with the Miller study, victim costs are subdivided into *Monetary* and *Quality of Life* estimates. When the Institute's cost-benefit model is used, monetary victim costs provide a more conservative estimate of victim costs, while the addition of quality of life cost estimates offer a more expansive definition of victim costs.

Step 3.23 The Criminal Justice System's Response to Crime in Washington Not all crime is reported to, or acted upon by, the criminal justice system in Washington. When crimes are reported, however, the use of taxpayer-financed resources begins. The degree to which those resources are used depends on the crime and the policies and practices governing the criminal justice system's response. In the preceding two sections of this report, *per-unit* marginal cost estimates were discussed. This section discusses *how many units* of Washington's criminal justice system are used when crime happens.

In the Institute's model, whenever a crime occurs and is reported to and acted upon by local law enforcement, one "unit" of local police, court, and prosecutor resources are used. For example, when an arrest is made for a robbery, one unit of police, at \$12,551 per unit (see Table IV-D), is consumed. Similarly, when a conviction for robbery is obtained in the courts, one unit of court and prosecutor resources, at \$18,399 per unit (see Table IV-D), is used. In the analysis that produced these cost estimates, regressions were run on the total operating costs of police and courts against the recorded number of arrests and convictions, respectively. Not all police activity results in arrests and not all court cases result in convictions. The per-unit cost estimates from the regression analyses impute these other costs to the actual number of arrests or convictions obtained. Suppose, for example, that nine out of ten court cases for robbery result in conviction and the other case results in dropped charges. The regression estimate of marginal court costs per robbery conviction

⁵⁷ Miller, Ted R., Mark A. Cohen, Brian Wiersema, *Victim Costs and Consequences: A New Look*, Research Report, Washington DC: National Institute of Justice, 1996.

⁵⁸ See, for example, Clear, Todd R., "The Cost of Crime—Or Are Prisons or Community Programs the Best Crime Prevention Investment?," *Community Corrections Report*, November/December 1996, Volume 4, No. 1.

includes the costs of the ten cases spread over the nine convictions in this example. As will be shown later in this report, when a program demonstrates success in reducing the number of convictions, it can also be expected to reduce the total number of court cases, including those not resulting in conviction, in proportion to the actual case outcomes of Washington courts (the nine-out-of-ten ratio in the example).

Once a person is convicted for a criminal offense, sentencing policies and practices in Washington affect the use of different local and state criminal justice resources. The Institute's model of the criminal justice system incorporates these resource usage patterns. Tables IV-G and IV-H show how adult and juvenile criminal justice resources are used for the different types of crimes being studied in the Institute's analysis.

The first set of columns on Table IV-G shows how the Institute's model separates adults sentenced to certain felony crimes into those who receive a sentence to a state prison and those who receive a local sentence. The information for this split comes from the Washington State Sentencing Guidelines Commission's analysis of actual sentences. Table IV-G also shows the average sentence received for those adults sentenced to a state prison. This information also comes from the Sentencing Guidelines Commission data. As a result of good-time reductions to some prison sentences, the average time actually served is often shorter than the original sentence. Table IV-G shows the average prison length of stay, which is computed in the model by multiplying the sentence by a average percentage good-time reduction. The data on the average sentence reductions, by crime, are obtained from an analysis supplied by the Washington State Department of Corrections. The amount of post-prison supervision and the amount of pre-prison use of local jail facilities by prison-bound offenders, by type of crime, are shown on Table IV-G.

For those adults sentenced to local jail, the average jail sentence, including both pre- and post-sentence lengths, are shown on Table IV-G. The jail data are obtained from the Washington Association of Sheriffs and Police Chiefs' Jail Information Program. Finally, Table IV-G also contains estimates on the average amount of community supervision time given to adults sentenced to local sanctions.

Juvenile sentencing information is shown on Table IV-H. The format is very similar to the adult sentencing data on Table IV-G, only the data sources are different. Under Washington's current laws, the age at which a youth is considered an adult varies for specific types of crimes. The first column on Table IV-H contains information on the maximum age for juvenile court jurisdiction by type of crime. The actual determination of juvenile or adult court jurisdiction depends on several factors in addition to a person's age and his or her crime. The model uses the information on Table IV-H as representative of the typical decisions made pursuant to current Washington State law.

The model uses data from the Washington Office of Financial Management to estimate the percent of all juvenile adjudications, by crime, that are committed to the Juvenile Rehabilitation Administration (JRA) and the number not committed to JRA, by crime. For those committed to JRA, Table IV-H shows the average length of stay in years. The data for these length-of-stay estimates also come from the Office of Financial Management's forecasting model. Estimates of the average length of stay on juvenile parole in years are also shown on Table IV-H. Those juveniles committed to JRA spend, on average, some

amount of pre-commitment time at local juvenile detention facilities. Table IV-H contains these estimates. For those juveniles not committed to JRA, the average length of stay at local juvenile detention facilities and the average length of local probation was estimated from a survey of juvenile courts conducted by the Washington State Institute for Public Policy. These estimates are shown on Table IV-H.

Step 3.24 Scaling Factors to Align Crime, Arrest, and Conviction Units In the model, the costs of different parts of the criminal justice system are estimated in different workload units. Tables IV-D and IV-E indicate the units in which the resource costs have been estimated. Some of the cost elements are estimated in dollars per arrest while most costs are estimated in dollars per conviction. Victim costs are estimated in dollars per victimization. The costs estimated in dollars per average daily population are functionally the same as a dollar-per-conviction estimate, since a conviction generally must precede the use of prisons, probation, detention facilities, and jails.

When the overall cost-benefit model is used to evaluate the net economics of a particular program, the outcome evaluation describing the program may measure units that are different from those estimated for the per unit marginal costs on Tables IV-D and IV-E. This will most often occur for the distinction between arrests and convictions. Not all arrests result in convictions, and the differences vary considerably by type of crime.

Significantly, some evaluations of programs are based on arrest outcomes, some are based on conviction outcomes, and others on the amount of self-reported crime. In the cost-benefit analysis, these units must be aligned to the units used in the cost model or else errors will occur. For example, an evaluation study may conclude that a program is successful in lowering recidivism rates as measured by reductions in arrests. As noted, however, not all arrests result in convictions and many of the costs of the criminal justice system start only when a conviction takes place. For example, a program that lowers the average number of subsequent arrests by an average of 1.4 per program participant will result in 1.4 or fewer subsequent convictions (and all of the avoided costs associated with convictions). To adjust for this, scaling factors are calculated and used in the model.

There are two primary sources of information on the amount of publicly known crime in Washington: the police and the courts. In this regard, law enforcement agencies keep track of two things: the number of crimes reported to them and any arrests they subsequently make. The Washington Association of Sheriffs and Police Chiefs (WASPC) compiles these numbers annually from individual law enforcement agencies. The courts in Washington keep track of the number of criminal cases processed and the number of criminal convictions recorded. The Washington State Office of the Administrator for the Courts (OAC) keeps track of court activity statewide.

These two sources for "official" crime statistics tell only part of the crime story. The total amount of crime in Washington is, of course, unknown because many crimes are not reported to the police or adjudicated through the courts. There is some information, however, on the total amount of crime in society. The U.S. Department of Justice and the Bureau of the Census undertake the "National Crime Victimization Survey." This national survey, conducted annually since 1973, asks approximately 100,000 people 12 years old

and older in 49,000 households about crimes they might have experienced during the previous six months.

Table IV-I displays the principal information about crime used in the Institute's model from the two state sources and the national crime survey. Column (1) shows information from the National Crime Victimization Survey. Among other questions, the Census Bureau asks crime victims throughout the nation how often they report their victimizations to police. For example, the 1998 survey indicates that about 62 percent of robbery victims report their victimizations to police. This information from the national survey of crime victims can be used with other data to help estimate the total number of serious crimes in Washington.

The data in column (5) show the adjusted number of crimes reported to police. The number of adult and juvenile arrests—as reported by the Washington Caseload Forecast Council with data from the Washington Association of Sheriffs and Police Chiefs—are listed in column (6). Column (8) of Table IV-I reports the total number of adult and juvenile offender convictions in the superior courts of Washington.

The Institute's cost-benefit model uses this information about crime, arrests, and court convictions to compute scaling factors. These factors are the ratios of the number of crimes per court conviction by offense type and the number of arrests per court conviction.

It would be better to have individual-level data to estimate these scaling factors rather than using the aggregate-level data shown on Table IV-I. Future work by the Institute will seek to improve these scaling factor estimates. Nonetheless, it is reasonable to assume that if a program demonstrates success in lowering the number of convictions for particular types of offenses, the total number of arrests and crimes avoided will be greater. The current scaling method is an attempt to provide reasonable estimates for this.

The model contains "switches" that allow the user to disable this scaling process. In the above example, if the scaling switch were turned off, a conviction for a robbery offense would involve only one arrest and only one victimization. The effect of turning the scaling switch off is to lower the cost savings that are possible if convictions are reduced. In general, leaving the switches on probably produces a more accurate representation of the actual resources used when workload changes.

Step 3.25 Computational Routine for Calculating the "Base" Present Value Costs of Resources The information from the preceding tables is combined to estimate the life-cycle costs associated with different crimes and different resources. The present-valued cost of a resource for a given type of offense is defined in the model as $PVCost_{ro}$. In this step in the overall cost-benefit model, the use of a resource starts in the first year and runs for the prescribed length of use of resource r for offense o (N_{ro}). Subsequent steps in the cost-benefit model, described later in this report, spread these "base" present-valued costs to the years in the future when it is estimated that offenses will occur for different types of populations.

If it is expected that real, inflation-adjusted, costs of resources will either rise or decline in the future, the costs for resource r can be escalated at an annual real escalation rate (Esc_r). There are only a few times when this value would be something other than zero; only in

those situations when the real per unit cost of a resource was expected to grow or decline over the long run would the value for Esc_r be other than zero. The values for Esc_r , currently in the model are shown on Table IV-D.

The base present value cost calculation is made with the following equation. The combined per unit operating and capital cost for resource r and offense o are converted to base year dollars. These costs are then escalated at a real growth rate and scaled as described above. The stream of costs run from time period 1 to the length of use of resource r and offense o . The cost stream is discounted to present value with the discount rate (Dis) chosen for the overall analysis.

$$(13) \quad PVCost_{ro} = \sum_{t=1}^{N_{ro}} \frac{(OCost_{ro} \times \frac{IPD_{base}}{IPD_{rp}} + KCost_{ro} \times \frac{IPD_{base}}{IPD_{rk}}) \times (1 + Esc_r)^t \times Scale_{ro}}{(1 + Dis)^{t-1}}$$

where,

- $PVCost_{ro}$ = The present value costs for resource r and offense o for time periods 1 to the number of periods for resource r and offense o .
- N_{ro} = The number of annual periods that resource r is used for offense o .
- $OCost_{ro}$ = The marginal operating cost of resource r and offense o , expressed in the year's dollars in which the resource cost is estimated.
- IPD_{base} = The implicit price deflator for the year chosen as the base year for the overall analysis.
- IPD_{rp} = The implicit price deflator for the year in which the operating cost p of resource r was estimated.
- $KCost_{ro}$ = The marginal capital cost of resource r and offense o , expressed in the year's dollars in which the resource cost is estimated.
- IPD_{rk} = The implicit price deflator for the year in which the capital cost k of resource r was estimated.
- $Scale_{ro}$ = A scaling factor for resource r and offense o that corresponds to the program under review.
- Esc_r = The annual rate of escalation in per unit costs for resource r . If the overall analysis is done in real terms, Esc_r will be the real escalation rate for a resource. If the overall analysis is done in nominal terms, Esc_r will be the general rate of inflation combined with any real escalation for a particular resource.
- Dis = The discount rate used in the analysis. If the overall analysis is done in real terms, Dis will be the real discount rate. If the overall analysis is done in nominal terms, Dis will be the general rate of inflation combined with the real discount rate.

Based on the inputs in the relevant tables in this report, the cost-benefit model computes base values for $PVCost_{ro}$ for each resource r and for each offense o in the model. Since the current model has fourteen separate resources and six offenses, $PVCost_{ro}$ is a matrix of 84 present-valued costs.

Step 3.26 Life-Cycle Offense Probabilities The next step in the Institute's cost-benefit model applies two kinds of probabilities: one describes the chance that particular types of offenses will be committed by particular populations; the other describes when in the future particular offenses are likely to be committed.

For those offenders who commit one felony offense sometime in the future, the chance that it will be an offense of a particular type is noted with:

$$(14) \quad OffenseTypeDist_o$$

for o types of offenses. The model currently classifies six types of felony offenses: murder, sex offenses, robbery, aggravated assault, property offenses (the sum of burglary, felony, larceny, and auto theft offenses) and drug offenses. The sum of these probabilities is set to equal one.

$$(15) \quad \sum_{o=1}^O OffenseTypeDist_o = 1.0$$

For example, for a given population targeted by an intervention program, the probabilities that an offender will commit one type of offense might be the estimates shown in the following table.

Example, Distribution of Offenses by Type (OffenseTypeDist _o)	
Murder	1.2%
Rape/Sex Offenses	3.1%
Robbery	9.2%
Aggravated Assault	13.7%
Property	15.3%
Drug	57.5%
Sum	100.0%

The table indicates that, for this population, of those who will commit a felony in the future, there is a 1.2 percent chance that it will be a murder, a 9.2 percent chance that it will be a robbery, and so on. These estimated probabilities will be different for any particular population under study. The distributions can be estimated from any of several sources of information, ranging from self-reported crime data, official arrest statistics, or offender-based court or institutional statistics.

Occasionally, the results of an outcome evaluation will contain longitudinal information about the types of offenses committed by treatment and non-treatment groups. More frequently, however, this type of information is not reported in evaluation research reports.

In these situations, reasonable estimates can be made from longitudinal research conducted on populations in a jurisdiction. For example, the reported research results for an intervention program for high-risk juvenile offenders may not include long-run information about the types of future offenses committed by treatment and non-treatment groups. This program, however, may have its most likely application for juvenile offenders on probation caseloads in Washington. From previous longitudinal research on juvenile probationers, reasonable estimates can be made about the types of future felony offenses these juveniles can be expected to commit. Those values would be used to estimate the *OffenseTypeDist*, distribution. Table IV-B in Section IV shows the results of the Institute's recidivism analyses for several Washington offender populations.

The next step is to estimate when the felony offense is likely to occur during the course of an offender's lifetime. In general, for a given population, the estimated lifetime offense curves will begin around the age of 10 and continue through the age of 65, or some other cut off point when the probability of offending is very low. The resulting age distribution is noted with:

$$(16) \quad OffenseAgeDist_{oy}$$

for offense o and for year y in an offender's lifetime.

For any offense o, the sum of the annual probabilities is set to equal one.

$$(17) \quad \sum_{y=10}^{65} OffenseAgeDist_{oy} = 1.0$$

These estimated probabilities will be different for particular population groups under study. Information ranging from self-reported crime data, official arrest statistics, or offender-based court or institutional statistics can be used to estimate the age distributions. Rarely will a program evaluation report this sort of information; it will almost always have to be inferred from other longitudinal research about the types of populations for which individual interventions are focused.

The Institute estimates the curves with log-normal probability density distributions, although other forms of probability distributions can be specified in the model. In general, the Institute has found that log-normal distributions provide the best fit to actual longitudinal data on offense distributions by age of occurrence.⁵⁹ For example, the Institute has analyzed the long-run re-offense distributions of Washington's juvenile probation population, by type of offense. From this research, log-normal distributions were estimated that provide reasonable estimates of when a juvenile offender on probation, who re-commits a felony offense, is likely to re-offend with a new felony.

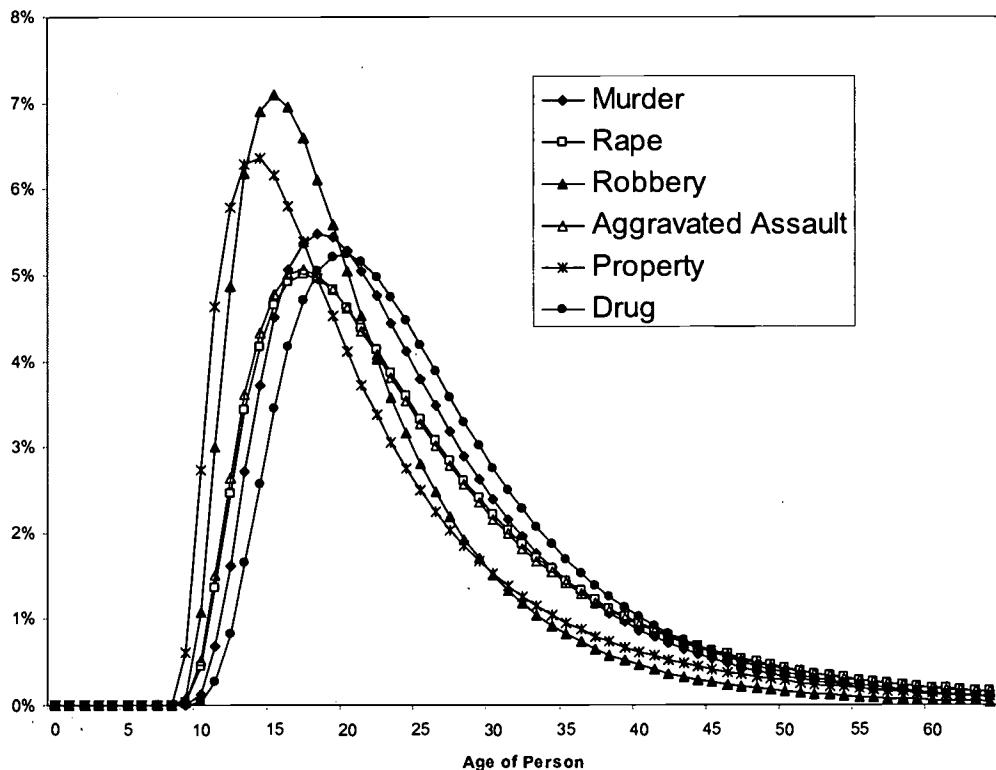
The following figure displays a typical set of lifetime offense curves described with equation (17). There is one curve for each of the six types of crime analyzed in the Institute's model.

⁵⁹ Other criminal justice research has reached similar conclusions regarding the use of log-normal distributions for describing offense rates and criminal careers. See Spelman, William, (1994), *Criminal Incapacitation*, New York: Plenum Press, p. 119.

By definition, each of the six curves describes the expected timing of the commission of one of the offense types. These crime curves are typical for the general population of offenders, but they can be different for any particular population under study.

Thus, for any particular program analyzed with the cost-benefit model, estimates of the expected future probability density distribution of one offense—by the type of offense and by the age of the offender at the time of the offense—must be specified.

The Expected Timing of Different Types of Offenses:
LogNormal Probability Density Distributions for Six Types of Felony Crime,
(set so that area under each curve = 100%)



Since the purpose of the cost-benefit model is to estimate the future costs and benefits of programs or policies that prevent, incapacitate, or deter future crime, an adjustment must be made to the two distributions ($OffenseTypeDist_o$ and $OffenseAgeDist_{oy}$). The adjustment is necessary to account for the age of a typical participant in, say, a prevention or rehabilitation program. If, for example, a juvenile rehabilitation program is being evaluated for 15-year-olds, then some portion of the 15-year-old's expected lifetime crime distribution will have already occurred by the time he or she is 15 years old. The model adjusts for this first by summing the expected lifetime probabilities in the remaining years in the offender's lifetime and then by dividing by the total lifetime probability for a particular offense. By definition, this adjustment factor will always be less than or equal to one. A matrix of adjustments ($OffenseAdjust_o$), by offense o , is calculated as follows:

$$(18) \quad OffenseAdjust_o = \frac{\sum_{y=P}^{\text{Max}} OffenseTypeDist_o \times OffenseAgeDist_{oy}}{\sum_{y=10}^{65} OffenseTypeDist_o \times OffenseAgeDist_{oy}}$$

$$(19) \quad \sum_{o=1}^O OffenseAdjust_o \leq 1.0$$

In this equation, P is the typical age of a program participant and Max is the maximum age measured with an evaluation, or with a multi-year recidivism study. Suppose that the cost-benefit model is used to evaluate the economics of a pre-school based prevention program with a typical age of a program participant at 3 years old ($P = 3$) and that the evaluation has tracked the population to age 27 ($\text{Max} = 27$). For 3-year-olds who grow up to become offenders, a substantial portion of their entire lifetime expected offense age distribution will be added up in calculating the adjustment factor (that is, $OffenseAdjust_o$ will be relatively close to 1.0). On the other hand, if the prevention program is aimed at 14 year olds ($P = 14$) and the study follows them to the age of 21, then a significant portion of the typical 14 year old's expected lifetime offense history will lie outside the measured time interval ($OffenseAdjust_o < 1.0$).

These probability distributions and the adjustment factor are then combined to produce a probability distribution of one expected future offense ($OffenseDist_{oy}$) that occurs sometime between the age of program participation and the maximum age measured. This is the key distribution from which the model calculates the expected present value of future costs of one new offense.

$$(20) \quad OffenseDist_{oy} = \frac{OffenseTypeDist_o \times OffenseAgeDist_{oy}}{OffenseAdjust_o}$$

The sum of this probability distribution of future offenses by offense type o and by year y is one since, by definition, the distribution applies to those who will commit at least one more felony offense. That is, the combined probabilities reflect the estimated likelihood of one future offense (from the typical age of a program participant to the maximum year measured) by the type of offense and when it is likely to occur.

$$(21) \quad \sum_{o=1}^O \sum_{y=P}^{\text{Max}} OffenseDist_{oy} = 1.0$$

Step 3.7 Computational Routine for Calculating the Value of Reducing One Criminal Offense Equation (21) calculates distributions of one future felony offense by type and by year in an offender's life. Equation (13) calculated the present value of a resource's cost, assuming its use began in the first year. In reality, costs will be incurred when an offense occurs, not necessarily in the first year of an offender's remaining life. Equation (21) is used to estimate the length of time-to-offense (or re-offense) for those that will offend (or re-

offend) at least once. The next step in the cost-benefit model distributes the base years costs calculated in equation (13) to the offense distribution derived in Equation (21). At this stage of the model, three additional factors can be included in the model.

First, an annualized rate of decay (or growth) in expected future savings from a prevention, rehabilitation, incapacitation, or deterrence program or policy can be specified. If a program is being evaluated that has shown to achieve results with participants in the first few years after treatment, it may be assumed that some of the beneficial attributes of the program will begin to wear off as the participant ages. Alternatively, it can be hypothesized that the beneficial effects of a program will grow over time; the longer a person stays crime-free, the less the chance that he or she will engage in crime subsequently. The model allows for an exponential rate of decay (or growth) to be applied. Unless there is experimental or strong theoretical evidence to support a non-zero decay (or growth) factor, this value will usually be set to zero. A parameter (*Decayrate*) is estimated or assumed for each program the model evaluates and an array of decay factors (*Decay_y*) for each year *y* is calculated with this equation:

$$(22) \quad Decay_y = (1 + Decayrate)^{y-1}$$

Second, if there is an assumed rate of escalation in the costs of a resource (see Table IV-D), then the model escalates the base year present valued costs to the year that the resource use begins. In equation (23), below, $(1+Esc_r)^{y-P-1}$ provides this adjustment.

Third, for some offenses, a resource is used either at the state level or the local level. For example, of all adult robbery sentences in Washington in fiscal year 1998, 70 percent resulted in a sentence to a state prison, while 30 percent resulted in local jail sentences. In this step of the model, these "splits" between state and local resources for a given type of offense are accounted for with a variable (*StateLocal_{ro}*) for resource *r* and offense *o*. The state and local "splits" are shown on Table IV-G for adult resources and Table IV-H for juvenile resources.

All of these adjustments are combined in the following equation that creates a matrix of costs (*OffenseCost_{roy}*) for each resource *r*, by each offense type *o*, spread to each year *y*.

$$(23) \quad OffenseCost_{roy} = OffenseDist_{oy} \times StateLocal_{ro} \times [PVCost_{ro} \times (1 + Esc_r)^{y-P-1}] \times Decay_y$$

In the next step, the costs identified in equation (23) (*OffenseCost_{roy}*) are summed to present value for all resources, all offenses, and all years. The costs are present valued to the age of the program participants, *P*. Thus if the program is designed to treat 12-year-olds, the clock starts running at twelve years. Any offense costs incurred when those twelve-year-olds are, say, 20-years-olds, are discounted eight years back to present value. If a pre-school program is designed for 4-year-olds, offenders who commit crimes when they are 20 years old will have the associated costs discounted 16 years to present value. With this method, the economics of programs that are aimed at diverse ages can be directly

compared with each other. The following equation is used to sum the total expected future costs of one offense.

$$(24) \quad TotalCost = \sum_{r=1}^R \sum_{o=1}^O \sum_{y=1}^{Max-P} \frac{OffenseCost_{roy}}{(1+Dis)^{y-1}}$$

When the model is used to study the costs and benefits of a program, the estimate for TotalCost is reported for three measures: taxpayer's total cost for one future offense; crime victim's monetary total cost of one future offense; and crime victim's quality of life total cost of one future offense. This separation is made so policy makers can either view the outcomes strictly from a taxpayer fiscal perspective, or more broadly from a perspective that includes crime victim costs.

Step 4 of 5: Calculating the Cost of Programs

A cost-benefit analysis requires information about the cost of providing program services. This information is often not reported in outcome evaluations and must be estimated. The net per unit costs of an intervention or program are estimated. This cost information is sometimes provided in an evaluation report. For example, an intervention may indicate that the cost of the experimental group was \$4,000 per participant and the cost of the control group was \$500 and that the program was less than one year in duration. These dollars might be expressed in 1987 dollars in the research report. Calculating the net program cost in the dollars for the base year chosen is accomplished with equation (25).

$$(25) \quad ProgramCost = \sum_{y=1}^{N_e} \frac{ExperimentalCost_y \times \frac{IPD_{base}}{IPD_e}}{(1 + Dis)^{y-1}} - \sum_{y=1}^{N_c} \frac{ControlCost_y \times \frac{IPD_{base}}{IPD_c}}{(1 + Dis)^{y-1}}$$

where,

- $ProgramCost$ = The net present value cost of the program, per program participant, in base year dollars.
- $ExperimentalCost_y$ = The reported or estimated annual cost of the treatment group, per program participant.
- IPD_{base} = The implicit price deflator for the year chosen as the base year for the overall analysis.
- IPD_e = The implicit price deflator for the year in which the experimental group costs are reported or estimated.
- $ControlCost_y$ = The reported or estimated annual cost of the control group, per program participant.
- IPD_c = The implicit price deflator for the year in which the control group costs are reported or estimated.
- Dis = The discount rate used in the analysis. If the overall analysis is done in real terms, Dis will be the real discount rate. If the overall analysis is done in nominal terms, Dis will be the general rate of inflation combined with the real discount rate.
- N_e = The number of years the experimental group cost is incurred.
- N_c = The number of years the control group cost is incurred.

Often, research results fail to measure or report the cost of an intervention. Analysts conducting the research are often more interested in the outcomes of the programs, not in how much they cost. In those cases the values for *Experimental/Cost* and *Control/Cost* in equation (25) must be estimated. Usually a research report will describe how much treatment is given to the experimental and control groups. This is usually expressed in hours or weeks of treatment. The Institute has separately estimated current per unit costs of different types of service. These costs reflect market rates for different types of labor and services. The per unit costs can be multiplied by the workload figures from the research report to estimate the per participant costs for the experimental and control groups.

The results of the Institute's analysis of program costs are shown on Table IV-J.

Step 5 of 5: Estimating the Net Economics of a Program: An Example Calculation for Functional Family Therapy

The information generated in the previous four steps can be combined to produce estimates of the net economics—that is, the estimated costs and benefits—for a program. To illustrate these how the information is assembled, an example will be presented of an intervention program now being implemented in Washington for juvenile offenders: Functional Family Therapy (FFT)—a program for juvenile offenders in juvenile court settings.⁶⁰ The procedures used to calculate the costs and benefits for all other programs follow those in this example.

Steps 1.1 to 1.6 We reviewed all of the studies we could locate evaluating the outcomes of FFT. The list of those studies and a summary of how the Institute coded and rated those findings is provided on the following excerpt from Table IV-K of this report. The full table in Section IV provides a similar listing for each of the program areas reviewed as part of the Institute's cost-benefit review.

(Excerpt from) Table IV-K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information					Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)			Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)				
	Design Score Researcher Role	N (Prog)	N (Comp)	Follow-up (yrs)	Crime Outcome	ES	AdjES	p	Sig	ES	AdjES	p	Sig
Alexander, J. F., & Parsons, B. F. (1973). "Short-term behavioral intervention with delinquent families: impact on family process and recidivism." <i>Journal of Abnormal Psychology</i> 81(3): 219-225. The result reported here measures subsequent criminal offenses; FFT group vs. an average rate for the comparison groups. The subjects were mostly juvenile status offenders.	4	1	46	46	1.0 Crc	-0.17	-0.06	.41	NS	-	-	-	-
Klein, N. C., Alexander, J. F., & Parsons, B. V. (1977). "Impact of family systems intervention on recidivism and sibling delinquency: A model of primary prevention and program evaluation." <i>Journal of Consulting and Clinical Psychology</i> 45: 469-474. This study measured the effects on the siblings of the Alexander & Parsons (1973) study. The result reported here, and the only one in the study, measures court referrals including status offenses. The subjects were mostly juvenile status offenders.	4	1	46	10	2.9 Cra	-0.44	-0.16	.18	NS	-	-	-	-
Barton, C., Alexander, J. F., Waldron, H., Turner, C. W., & Warburton, J. (1985). "Generalizing treatment effects of functional family therapy: Three replications." <i>American Journal of Family Therapy</i> 13: 16-26. The research reported here is from the "hard core" delinquent study, i.e., for serious delinquents who had been incarcerated in a state training school. The test reported here is for FFT vs. a matched group (no significant differences).	3	1	30	44	1.3 At	-0.83	-0.21	.00	S***	-0.60	-0.15	.04	S**
Gordon, D., Arbutnot, J., Gustafson, K., & McGreen, O. (1988) "Home-based behavioral-systems family therapy with disadvantaged juvenile delinquents." <i>American Journal of Family Therapy</i> 16: 243-255. This research used a matched group comparison. Based on criminal history, the FFT had a higher risk group than the matched comparisons. The result reported here is felony convictions during the juvenile years.	3	0	27	27	2.5 Cf	-0.67	-0.34	.02	S**	-	-	-	-
Gordon, D., Graves, K., & Arbutnot, J. (1995). "The effect of functional family therapy for delinquents on adult criminal behavior." <i>Criminal Justice and Behavior</i> 22(1): 60-73. This research used a matched group comparison. Based on criminal history, the FFT had a higher risk group than the matched comparisons. The result reported here is felony convictions during the adult years.	3	0	23	22	5.0 Cf	-0.33	-0.17	.27	NS	-	-	-	-
Gordon, D. A. (1995). Functional family therapy for delinquents. In Ross, R. R., Antonowics, D. H., Dhaliwal, G., (eds), <i>Going Straight: Effective Delinquency Prevention and Offender Rehabilitation</i> . Ottawa, Ontario: Air training and Publications, pp 163-178. This trial of FFT was for youth released from a state institution for juvenile offenders. The comparison group was matched for risk of re-offending, age, and social class.	3	0	27	25	1.3 Rei	-0.61	-0.31	.03	S**	-	-	-	-
Hansson, K. (1998). Functional Family Therapy Replication in Sweden: Treatment Outcome with Juvenile Delinquents. Paper presented to the Eighth International Conference on treating addictive behaviors. Santa Fe, NM, February 1998, as reported in: Alexander, J., Barton, C., Gordon, D., Grotjeter, J., Hansson, K., Harrison, R., Mears, S., Mihalic, S., Parsons, B., Pugh, C., Schulman, S., Waldron, H., & Sexton, T. (1998). Blueprints for Violence Prevention, Book Three: Functional Family Therapy. Boulder, CO: Center for the Study and Prevention of Violence. This is a random assignment evaluation of a FFT test for (mostly) male youth arrested by police in Lund Sweden for serious offenses. Confirming evidence on the random assignment was not reported.	4	0	45	50	2.0 At	-0.64	-0.48	.00	S***	-	-	-	-
Lantz, B.L. (1982). Preventing Adolescent Placement Through Functional Family Therapy and Tracking. Utah Department of Social Services, West Valley Social Services, District 2K, Kearns, UT 84118, Grant #CDP 1070 UT 83-0128020 87-6000-545-W, as reported in: Alexander, J., Barton, C., Gordon, D., Grotjeter, J., Hansson, K., Harrison, R., Mears, S., Mihalic, S., Parsons, B., Pugh, C., Schulman, S., Waldron, H., & Sexton, T. (1998). Blueprints for Violence Prevention, Book Three: Functional Family Therapy. Boulder, CO: Center for the Study and Prevention of Violence. This was a random assignment evaluation of FFT for adolescents at risk for out-of-home placement due to serious delinquency. The outcome measure is re-offenses at FFT termination.	LT3	0	22	24	0.2 At	-	-	-	-	-	-	-	-
Alexander, J., Barton, C., Gordon, D., Grotjeter, J., Hansson, K., Harrison, R., Mears, S., Mihalic, S., Parsons, B., Pugh, C., Schulman, S., Waldron, H., & Sexton, T. (1998). Blueprints for Violence Prevention, Book Three: Functional Family Therapy. Boulder, CO: Center for the Study and Prevention of Violence.	-	0	-	-	-	-	-	-	-	-	-	-	-

⁶⁰ For more information on Functional Family Therapy, see the website of the Center for the Study and Prevention of Violence (University of Colorado, Boulder): http://www.colorado.edu/cspv/blueprints/model/ten_Function.htm Also, the Washington State Institute for Public Policy is conducting a random-assignment outcome evaluation of FFT and the results will be available in 2002.

Step 1.7 The results from these individual evaluations are then "meta-analyzed" as described in Section III, Step 1.7. The results of the meta-analysis of FFT findings are summarized on the following excerpt from Table IV-A. In section IV, Table IV-A provides the full meta-analytic findings for each of the program areas reviewed as part of the Institute's cost-benefit review.

(Excerpt from) Table VI—A
Meta-Analytic Estimates of Standardized Mean Effect Sizes

Type of Prevention or Intervention Program	Difference in the Proportion of Offenders v. Non-Offenders (a negative ES means lower recidivism)						Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)							
	Number of Effect Sizes Included in the Analysis	Mean Effect Size and Standard Error		95% Confidence Interval ^(c)		Homogeneity Test ^(d)		Number of Effect Sizes Included in the Analysis	Mean Effect Size and Standard Error		95% Confidence Interval ^(c)		Homogeneity Test ^(d)	
		ES ^(e)	SE ^(b)	Lower	Upper	Q	p		ES ^(e)	SE ^(b)	Lower	Upper	Q	p
Functional Family Therapy	7	-0.254	0.096	-0.067	-0.442	2.31	0.89	1	-0.149	0.237	0.315	-0.814	n/a	n/a

Sources and Notes:

- (a) The summary effect size for each area is the weighted average standardized mean difference effect size. The mean difference effect sizes for the individual studies are approximated from proportion data (dichotomous group recidivism rates) using the arcsine transformation as described in Lipsey & Wilson(2000), Table B10, Formula 22. The individual study effect sizes are adjusted using the Hedges correction for small sample sizes as described in Lipsey & Wilson(2000), page 49, Equation 3.22. The weights are the inverse variance weights as described in Lipsey & Wilson(2000), page 49, Equations 3.23 and 3.24.
- (b) The standard error of the mean weighted average effect size is from the techniques described in Lipsey & Wilson(2000), page 114.
- (c) The 95% confidence intervals around of the mean weighted average effect size is from the technique described in Lipsey & Wilson(2000), page 114.
- (d) The calculation of the Q statistic is described in Lipsey & Wilson(2000), page 116; it is distributed as a chi-square with k-1 degrees of freedom where k is the number of effect sizes.
- (e) The summary effect size for each area is the weighted average standardized mean difference effect size. The standardized mean difference effect sizes for the individual studies is calculated with the technique described in Lipsey & Wilson(2000), page 48, Formula 3.21. The individual study effect sizes are adjusted using the Hedges correction for small sample sizes as described in Lipsey & Wilson(2000), page 49, Equation 3.22. The weights are the inverse variance weights as described in Lipsey & Wilson(2000), page 49, Equations 3.23 and 3.24.

The meta-analytic findings for FFT on Table IV-A indicate that the Institute calculated the average effect size for bivariate recidivism for FFT from seven evaluations. The mean effect size for simple recidivism rates was found to be -.254. There was only one study that contained the information necessary to calculate the effect size for the difference in the mean number of offenses for those who were recidivists. That mean effect size is -.149. Note also that the standard errors and 95 percent confidence intervals are provided. This information can be used to run sensitivity results on the costs and benefits of FFT. For FFT, the meta-analytic finding for the difference in proportions is statistically significant (the 95 percent confidence interval does not include zero) while the large standard error (from one study) for the difference in means includes zero and is not statistically significant at the .05 level.

These two effect sizes are reprinted on the first line on Table III-A.

Step 2 Next, the long-run recidivism information on Table IV-B from the Institute's study of offenders on probation in Washington juvenile court, indicates that 45.8 percent of these juveniles re-offended with at least one felony conviction after a seven-year follow up. Additionally, Table IV-B shows that of those offenders who re-offended, the mean number of felony reconvictions was 2.44. These two numbers are also reprinted on the second row of Table III-A.

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Table III—A
Functional Family Therapy

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses	...the Avg. # of Offenses per Offender	Expected Number of Offenses per Person				
	Estimated effect size (from research findings)	-0.254			1.117	0.726			
Expected outcomes for those ...									
...without the program ⁽²⁾	45.8%	X	2.44	=	1.117				
...with the program (from effect sizes)	33.5%	X	2.17	=	0.726				
Expected change in the number of offenses ⁽²⁾					-0.390				
Adjustments	Adjustment 1: (felonies as % of total)				100.0%				
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)				66.7%				
	Without the program, the adjusted expected number of offenses per person				1.675				
	With the program, the adjusted expected number of offenses per person				1.089				
	Expected change in the long-run number of offenses, after adjustments				-0.5856				
	Percentage change				-35.0%				
		Total	Sex Offenses	Rob-bery	Agg. Assault	Fel. Prop.	Drug	Misd.	
Taxpayer CJS Costs	Cost of One Future Offense	Present value cost of one offense	-\$355,086	-\$90,593	-\$92,705	-\$56,790	-\$10,898	-\$16,122	\$0
		W/O Prog., offense distribution ⁽²⁾	100%	1.29%	1.32%	7.22%	16.71%	55.03%	18.42% 0.00%
		Expected cost (PV) of one offense	-\$30,944	-\$4,591	-\$1,200	-\$6,695	-\$9,492	-\$5,997	-\$2,969 \$0
		With Prog., offense distribution	100%	1.29%	1.32%	7.22%	16.71%	55.03%	18.42% 0.00%
		Expected cost (PV) of one offense	-\$30,944	-\$4,591	-\$1,200	-\$6,695	-\$9,492	-\$5,997	-\$2,969 \$0
	Adj. 4: (Overall adjustment to cost)	0.9							
	Future CJS costs without program	-\$46,646							
Sum- mary	Program Benefits and Costs	Future CJS costs with program	-\$30,336						
		Future CJS costs avoided (incurred)	\$16,310						
		Incremental Treatment Cost (savings)	\$2,161						
		NPV of the program	\$14,149						
		Benefits per dollar of cost	\$7.55						
		Pct. reduction to break-even	-4.6%						
	Estimated present value cost								
Victim Monetary Costs	One Victimi- zation Per Offense	Distribution of one victimization ⁽²⁾	100.00%	1.29%	1.32%	7.22%	16.71%	55.03%	18.42% 0.00%
		Expected cost, one victimization	-\$14,253	-\$13,438	-\$83	-\$172	-\$246	-\$313	\$0 \$0
		Times prog. change in offenses	\$8,347						
		Cumulative program benefits	\$24,657						
		Cumulative NPV	\$22,497						
		Cumulative benefits/dollar of cost	\$11.41						
	Dist. of multiple victimizations	100%	0.008%	0.07%	0.41%	0.62%	11.66%	87.23%	0.00%
Vic. Quality of Life Costs	Multiple Victimi- zations Per Offense	Lambda per official offense	168.91						
		Expected vict. cost, one offense	-\$28,742	-\$13,559	-\$779	-\$1,642	-\$1,547	-\$11,215	\$0 \$0
		Lambda times change in offenses	(98.92)						
		Expected vict. benefits with prog.	\$16,833	\$7,941	\$456	\$962	\$906	\$6,568	\$0 \$0
		Cumulative program benefits	\$33,143						
		Cumulative NPV	\$30,982						
		Cumulative benefits/dollar of cost	\$15.34						
	Estimated present value cost								
Multiple Victi- miza- tions	One Victi- miza- tion	Expected cost, one victimization	-\$27,803	-\$1,928,591	-\$83,354	-\$5,884	-\$8,008	\$0	\$0 \$0
		Times prog. change in offenses	\$16,283	-\$24,936	-\$1,104	-\$425	-\$1,338	\$0	\$0 \$0
		Cumulative program benefits	\$40,941						
		Cumulative NPV	\$38,780						
		Cumulative benefits/dollar of cost	\$18.95						
		Expected vict. cost, one offense	-\$47,955	-\$25,161	-\$10,330	-\$4,065	-\$8,400	\$0	\$0 \$0
		Expected vict. benefits with prog.	\$28,085	\$14,735	\$6,050	\$2,381	\$4,919	\$0	\$0 \$0
		Cumulative program benefits	\$61,228						
		Cumulative NPV	\$59,067						
		Cumulative benefits/dollar of cost	\$28.34						

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington, 7-year follow-up

The estimated effect that FFT is expected to have on these two recidivism measures is shown on the third row.⁶¹ These calculations are the inverse of the arcsine transformation (for the bivariate offense measure, equation (1)) and the difference-in-means statistic (for the number of re-offenses for those who re-offend, equation (2)).

$$(26) \quad P_{prog} = \sin\left(\arcsin\sqrt{P_{base}} + \frac{\overline{ES}_{m(p)i}}{2}\right)^2$$

In this formula, P_{prog} is the percentage of the population with the program expected to offend (or re-offend); P_{base} is the percentage of the relevant Washington population expected to offend (or re-offend) without the program; and $\overline{ES}_{m(p)i}$, from equation (6), is the weighted average effect size for the difference between proportions from the experimental research data.

$$(27) \quad M_{prog} = ES_{mi} \times SD_{base} + M_{base}$$

In this formula, M_{prog} is the mean number of offenses of those that offend (or re-offend) for the group given the program; ES_{mi} , from equation (6), is the effect size for the difference between means from the experimental research data; M_{base} is the mean number of offenses (or re-offenses) of those that offend for the relevant Washington population for whom the program would be given; SD_{base} is the standard deviation of the mean number of offenses of those that offend (or re-offend) for the relevant Washington population for whom the program would be given.

In the FFT example, the numbers on the third line indicate that the bivariate recidivism rate is expected to drop from 45.8 percent to 33.5 percent with the research-based -.254 effect size. For the difference in mean offenses among the re-offenders, the -.149 effect size is expected to lower the average number of offenses for recidivists from 2.44 to 2.17. Multiplication produces the expected number of offenses for the program participants and non-participants. The resulting difference in these two numbers is an estimate of .39 felony convictions avoided per FFT participant over the 7 year follow up period.

Two adjustments to this estimated value may then made. The first adjustment is used for those situations when the offenses estimated on the second line of Table III-A include non-felony criminal offenses. The Institute's cost-benefit model estimates the costs to taxpayers and crime victims of felony crime; currently, our model does not estimate values for non-felony crime.⁶² In these instances, Adjustment 1 is used to reduce the number of offenses by estimating the proportion that is felonies. For the FFT example, no adjustment is made (that is, the factor is 100 percent) since the units are already estimated as felony re-convictions.

⁶¹ See, for example, Lipsey, M. W., & Wilson, D. B., (1998) "Effective Intervention for Serious Juvenile Offenders" in Loeber, R & Farrington, D. P., *Serious & Violent Juvenile Offenders, Risk Factors and Successful Interventions*, Thousand Oaks: Sage Publications, Chapter 13. Lipsey and Wilson demonstrate the application of effect sizes from experimental research to base recidivism rates for populations.

⁶² The WSIPP model is going to be expanded to include the benefits of reductions in misdemeanor crime.

The second adjustment is used to extend the follow-up period for evaluating the stream of expected benefits. In the cost-benefit model, the calculation of these extension factors involves a two-step process.⁶³ First, uniform cut-off ages are selected for juvenile and adult programs. For all programs for youth, the extension cut-off age is set to 30 years of age. That is, based on the research record, any reduced crime that an intervention is expected to generate is extended to the age of 30. For adult offender programs the cut-off age is set at 50. Next, a calculation is made of a specific factor to account for the amount of crime from the maximum age from the long-run recidivism study findings, to the cut-off age for the extension period. In the cost-benefit model, these factors are based on either annual felony arrest probabilities by single year of age, or annual felony conviction probabilities by single year of age. These two distributions are calculated with state-wide Washington felony arrest and conviction data. Cumulative probability distributions are then summed and the factor between any two ages is calculated.

For the FFT example, it is assumed that the typical age for an FFT is 15 years old. The Institute's long-run recidivism analysis provides a seven year follow up for juvenile court probation (the results shown on the second line of Figure III-A. Thus the estimated age for follow-up is 22. The adjustment then calculates the difference in the cumulative conviction curve between the ages of 22 and 30—the cut-off age chosen for all juvenile programs. The result is .667, as shown on Figure III-A. This means that we would expect that the amount of offending by age 30 that has been exhibited by age 22 is 66.7 percent. This factor is then used (via division) to estimate the additional criminality that can be avoided between the ages of 22 and 30. Clearly, it would be better to have actual longitudinal research data for the program rather than having to estimate the long-term effects. Most research studies, however, do not have the luxury of long-term follow-ups. It would be a mistake, however, to assume that all the benefits end after some short period of time. The method the Institute's cost-benefit model uses is meant to provide reasonable estimates of some of the future benefits.

For the FFT example, the result of these calculations is an estimated .5856 felony convictions avoided, per FFT participant, between the age of 15 (when the juvenile offender enters FFT) and the age of 30 (the last year chosen for estimating benefits).

Step 3 The next section of Table IV-A uses information from the estimated cost of crime to taxpayers and crime victims. The first row of this section of the table shows the estimates for the expected costs associated with *one* future conviction by type of offense. These are the numbers estimated in equation (24) for each crime *R*. For example, a murder is estimated to cost taxpayers \$355,086 (in present value 2000 dollars) if committed by someone in the intended population for FFT. This figure, as described in Step 3, reflects the expected present value costs to Washington taxpayers if a murder conviction is obtained for offenders with the characteristics of the juvenile offender population eligible for FFT. The figure is a function of the estimated marginal capital and operating costs of Washington's criminal justice system and probability and severity of sentencing in Washington. Present value costs for the other offenses are also shown.

⁶³ The information for these computations are standard FBI Uniform Crime Report data for Washington on arrests by age, and a special run by WSIPP of the felony conviction rates, by age, for juvenile and offenders in Washington. The denominators for both of these calculations are single year of age population totals for Washington produced by the Washington Office of Financial Management.

The next row shows the percentage distribution of felony offenses as displayed on Table IV-B. In the next row, the expected weighted average criminal justice costs associated with one future conviction is shown; for this population that figure is estimated to be \$30,944.

For the FFT example, the next two lines on Table III-A are identical to those just discussed. If, however, there was evaluation evidence that FFT altered the distribution of expected future offenses—perhaps by lowering the chance of more serious offenses relative to less serious offenses—then these two lines provided a way to estimate the value of this. As described earlier, most evaluations do not report this type of information.

The next line, referred to as “Adj. 3: (Overall adjustment to cost),” is a factor used by the Institute to be conservative in its estimates of taxpayer benefits. The premise behind the Institute’s cost-benefit model is that if the number of criminal justice events (arrests or convictions) is reduced, then incremental taxpayer costs for the criminal justice system will also be reduced. There is a strong reason to believe that this is the case. The state legislature and county commissioners tend to budget by workload measures. For example, when the average daily population of the Department of Corrections (DOC) changes, so too does the amount of money allocated to DOC by the legislature. The \$30,944 marginal cost estimate is based on empirical evidence that criminal justice costs at all levels of the system do follow workloads. Since there is competition for scarce public funds in the budgetary process—between different areas of government as well as the alternative of lowering taxes—there is every reason to believe that this value reasonably reflects what will happen to criminal justice costs when workload goes up, or down.

Some have noted, however, that criminal justice costs go up with workload but may not fall as fast (or at all) when workload decreases. The implication is that the cost function is not symmetrical. While we feel that there is not much empirical support for this position, the marginal costs developed by the Institute were estimated for time periods when criminal justice system costs were generally increasing. So while we believe that the criminal justice cost function is symmetrical, we do not know for sure that if a program reduces criminal justice workloads, budget-makers will reduce costs by a commensurate amount.

Thus the cost adjustment factor (the factor is .9 on table Table III-A) is an arbitrary percentage reduction in the taxpayer value of reducing crime. We think there is a good case for not making an arbitrary reduction in the estimated value of reducing crime. But, as a cautious assumption, and to avoid the chance that taxpayer benefits could be overstated, the factor is set to reflect a 10 percent reduction. For the FFT example, another way of saying this is that when felony convictions go up by one, we have strong empirical support to conclude that criminal justice costs go up by \$30,944. But, to be cautious, when felony convictions go down by one, we are only assuming that costs go down by \$27,850.

The next set of rows on Table III-A shows the derivation of the expected present value costs avoided by the FFT intervention per participant: $\$16,310 = \$30,944 \times .9 \times .5856$ (the change in the expected number of convictions per program participant).

Subtracted from this amount are the program costs per participant for FFT as estimated with equation (25). For FFT, the program costs are estimated to be \$2,161 per FFT participant.

After the program cost is subtracted, the bottom line of FFT for taxpayers is, on average, a net gain of \$14,149 for the average offender in the program. Per dollar of cost, the FFT program is expected to produce \$7.55 of taxpayer benefits.

A practical feature of the model structure is that "reverse engineering" calculations are possible. One of the most difficult parts of any evaluation research is estimating how successful programs are likely to be in practice. It can take several years to track a program in order to estimate its effects on crime. Estimating costs, however, is easier than evaluating program success rates. For example, for an early intervention program designed to keep truants from becoming criminal offenders, it is an arduous task to determine how effective the program will be in the long run. With a little algebra, however, it is possible to solve for that factor and to assess the reasonableness of the result.

The break-even level for a program is defined with the following equation:

$$BreakEven = \frac{ProgramCost}{(P_{base} \times M_{base} \times Adj) \times TotalCost_{cjs}} - 1$$

In the FFT example, *ProgramCost* is \$2,161 per program participant. P_{base} is the percentage of the relevant Washington population expected to offend (or re-offend) without the program. M_{base} is the mean number of offenses (of those who re-offend) for the relevant Washington population for whom the FFT program would be given. *Adj* are the two adjustments discussed above.

$$-.046 = \frac{\$2,161}{((0.458 \times 2.44) / .667) \times (\$30,340 * .9)} * -1$$

Therefore, in order for FFT to break-even from a taxpayer's perspective, the program needs to achieve a 4.6 percent reduction the number of convictions.

The bottom sections of Table III-A show estimates of the crime victim benefits associated with the expected effects of FFT. In addition to costs paid by taxpayers, many of the costs of crime are borne by victims. Some victims lose their lives. Others suffer direct, out-of-pocket, personal or property losses. Psychological consequences also occur to crime victims, including feeling less secure in society. The magnitude of victim costs is very difficult—and in some cases impossible—to quantify.

In recent years, however, national studies have taken significant steps in estimating crime victim costs. One US Department of Justice study by Miller, Cohen, and Wiersema divides crime victim costs into two types: a) *Monetary* costs which include medical and mental health care expenses, property damage and losses, and the reduction in future earnings incurred by crime victims; and b) *Quality of Life* cost estimates which place a dollar value on the pain and suffering of crime victims.⁶⁴ In that study, the quality of life victim costs are computed from jury awards for pain, suffering, and lost quality of life; for murders, the victim

⁶⁴ Miller, Ted R., Mark A. Cohen, Brian Wiersema, *Victim Costs and Consequences: A New Look*, Research Report, Washington DC: National Institute of Justice, 1996.

quality of life value is estimated from the amount people spend to reduce risks of death. The quality of life victim cost calculations are controversial for use in setting public policy.⁶⁵

In keeping with the Miller-Cohen study, Table III-A reports victim costs subdivided into *Monetary* and *Quality of Life* estimates. Monetary victim costs provide a more conservative estimate of victim costs, while the addition of quality of life cost estimates offer a more expansive definition of victim costs.

For the FFT example, the table shows that the monetary crime victim benefits of avoiding one felony conviction are estimated at \$14,253. This figure assumes only one victimization per conviction. When this value is multiplied by the 0.5856 reduced felonies per typical FFT participant, the expected benefits are \$8,347 in monetary crime victim benefits. When these benefits are added to the taxpayer benefits of \$16,310, the cumulative benefit becomes \$24,657. Subtracting the cost of the program from this value produces a total NPV of \$22,497, or \$11.41 of benefits per dollar cost.

The victim monetary costs are then shown assuming multiple victimizations per conviction. As the numbers on Table IV-I indicate, there are many more actual crimes than there are arrests or convictions. If a program is expected to reduce the number of convictions, then it may be reasonable to assume that the actual number of victimizations reduced will be greater than the number of convictions reduced. Table III-A presents the victim benefits both ways: assuming only one victimization per conviction or arrest (described in the previous paragraph), or assuming multiple victimizations per conviction or arrest.

To provide a reasonable estimate for multiple victimizations per conviction or arrest, the Institute calculates a crime rate lambda (the number of crimes per official offense). The estimates of lambda for the juvenile court population for FFT are demonstrated in the following table.

Calculation of the Number of Crimes per Conviction (Lambda) for Juvenile Court Probationers				
Type of Crime	Percent Distribution of Juvenile Court Probationers Re-Convicted, by Type of Offense, From Table IV-B (1)	Estimated Probability of Conviction, From Table IV-I, column(9) (2)	Estimates of Lambda—the number of crimes per conviction (column(1)/column(2)) (3)	Percent Distribution of Lambda (4)
Murder	1.3%	99.11%	0.01	0.008%
Rape/Sex	1.3%	10.69%	0.12	0.07%
Robbery	7.2%	10.45%	0.69	0.41%
AA	16.7%	15.93%	1.05	0.62%
Prop	55.0%	2.79%	19.70	11.66%
Drug	18.4%	0.13%	147.34	87.23%
Total	100.0%		168.91	100.0%
Total-NonDrug			21.57	

⁶⁵ See, for example, Clear, Todd R., "The Cost of Crime—Or Are Prisons or Community Programs the Best Crime Prevention Investment?," *Community Corrections Report*, November/December 1996, Volume 4, No. 1.

This procedure is used to calculate lambda for each population studied with the cost-benefit model. The method estimates lambda based on the percentage distribution of the types of offenses for a given population (from Table IV-B) and the probability of convictions by type of offense (from Table IV-I). In the above table, the estimated non-drug lambda for the FFT-eligible juvenile court population is 21.57 felony convictions. This estimate is in the range of estimates of non-drug lambdas from other research on criminal deterrence and incapacitation.⁶⁶

The total lambda and its percentage distribution are shown on Table III-A in the Multiple Victimization section. In conjunction with the present valued victim costs by crime type and the estimated number of convictions reduced with FFT, an estimate of \$16,883 is calculated for the monetary victim costs avoided with FFT, assuming multiple victimizations per conviction. When these benefits are added to the taxpayer benefits of \$16,310, the cumulative benefit becomes \$33,143. Subtracting the cost of the program from this value produces a total NPV of \$30,982, or \$15.34 of benefits per dollar cost.

The last part of Table III-A uses the same routine to estimate the value to crime victims using the quality of life victimization costs produced by Miller and Cohen. Including all victimization costs (monetary and quality of life) and including multiple victimizations avoided for each conviction avoided, produces for FFT an estimate of \$61,228 per FFT participant in taxpayer and victim benefits. Subtracting the cost of the program from this value produces a total NPV of \$59,067, or \$28.34 of benefits per dollar cost.

Two additional financial statistics can also be calculated for each program analyzed: the internal rate of return on investment, and the number of years it takes for the taxpayer's investment to be paid back (these statistics are not printed on Table III-A). Both of these calculations are derived from the basic series of cash flows generated with the model. The internal rate of return is calculated using Microsoft Excel's *IRR* function. The present value cost of the program in equation is offset against the annual stream of benefits of reducing crime in equation. Excel calculates the internal rate of return from this series of negative and positive cash flows. For the payback statistic, the annual discounted benefits are cumulated from year one forward. When the cumulative sum of benefits is greater than or equal to the cost of the program, the year in which the up-front cost is paid back is recorded.

Testing the Sensitivity of Input Data and Assumptions

The preceding sections describe a cost-benefit model that is "deterministic" in nature. That is, based on all of the inputs to the model, a single set of cost-benefit summary statistics are produced: the net present value of a program; its benefits/cost ratio; its internal rate of return; the break-even levels; and the number of years it takes to pay back the original investment.

⁶⁶ See, for example, Marvell, T. B., & Moody, C. E., (1994), Prison population growth and crime reduction, *Journal of Quantitative Criminology*, 10(2): 109-140.

Many of the inputs to the model are, however, uncertain to one degree or another. Because of this uncertainty, it is important to test how sensitive these "bottom line" conclusions are to changes in some of the key input assumptions.

The Institute does this by using a multi-variable simulation technique. The cost-benefit model uses Palisade's @RISK spreadsheet add-in to estimate the uncertainty around several of the inputs to the model. The @RISK program performs a "monte carlo" simulation. In this type of procedure, the model computes all of the calculations described in this report—*after drawing randomly from user-defined probability distributions for each of the key input parameters*. The model performs these random draws many times (the user can select 500, 1000, 5000 or as many times as he or she wants), each time calculating different bottom-line cost-benefit statistics for an intervention. In the end, instead of having a single set of bottom-line values for a program, a probability distribution is formed. This allows an assessment of the riskiness and sensitivity of the key model inputs and, ultimately, the reasonableness of the results of the cost-benefit analysis. For example, instead of having one benefit-cost ratio of, say, \$1.40 of benefits per dollar of cost, the model would produce two values: the expected value of \$1.40 and a statement indicating the percent of the time that program's benefit cost ratio could be expected to fall below \$1.00. With this additional information, the user can determine how risky the overall investment is, in addition to the expected bottom-line value.

The full results of the sensitivity analysis applied to the estimates shown in this report will be described fully in a version 5.0 of this report.

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Table VI—A
Meta-Analytic Estimates of Standardized Mean Effect Sizes

Type of Prevention or Intervention Program	Difference in the Proportion of Offenders v. Non-Offenders (a negative ES means lower recidivism)					Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)							
	Number of Effect Sizes Included in the Analysis	Mean Effect Size ES ^(a)	95% Confidence Interval ^(c)	Homogeneity Test ^(d)	Number of Effect Sizes Included in the Analysis	Mean Effect Size and Standard Error ES ^(e) SE ^(b)	95% Confidence Interval ^(c)	Homogeneity Test ^(d)					
		Lower	Upper	Q	p	Lower	Upper	Q	p				
Adult In-Prison Therapeutic Community without Community Aftercare	5	-0.048	0.046	0.043	-0.138	1.27	0.87	0	n/e	n/e	n/e	n/e	n/e
Adult In-Prison Therapeutic Community with Community Aftercare	11	-0.080	0.025	-0.031	-0.128	5.77	0.83	0	n/e	n/e	n/e	n/e	n/e
Non-Prison Therapeutic Community	2	-0.171	0.098	0.021	-0.363	0.18	0.67	0	n/e	n/e	n/e	n/e	n/e
Adult Drug Courts	26	-0.075	0.022	-0.032	-0.119	23.08	0.57	0	n/e	n/e	n/e	n/e	n/e
Adult In-Prison Non-residential Substance Abuse Treatment	5	-0.088	0.033	-0.024	-0.153	2.94	0.57	0	n/e	n/e	n/e	n/e	n/e
Adult Community-Based Substance Abuse Treatment	3	-0.072	0.049	0.024	-0.169	1.09	0.58	0	n/e	n/e	n/e	n/e	n/e
Adult Offender Case Management Substance Abuse Programs	12	-0.034	0.028	0.021	-0.089	37.14	0.00	0	n/e	n/e	n/e	n/e	n/e
Adult Intensive Surveillance-Oriented Enhancements to Probation/Parole	19	-0.032	0.033	0.032	-0.097	19.50	0.36	0	n/e	n/e	n/e	n/e	n/e
Adult Intensive Supervision Treatment-Oriented Enhancement to Probation/Parole	6	-0.104	0.055	0.004	-0.212	0.37	1.00	0	n/e	n/e	n/e	n/e	n/e
Adult Intensive Supervision Surveillance-Oriented Diversion from Prison	3	-0.004	0.080	0.153	-0.162	1.41	0.49	0	n/e	n/e	n/e	n/e	n/e
Adult Cognitive-Behavioral Sex Offender Treatment with (or without) Relapse Prevention	7	-0.107	0.048	-0.013	-0.200	3.11	0.79	0	n/e	n/e	n/e	n/e	n/e
Adult Drug Treatment Programs in Jails	7	-0.047	0.050	0.050	-0.145	4.21	0.65	0	n/e	n/e	n/e	n/e	n/e
Work Release Programs	2	-0.027	0.107	0.184	-0.237	0.58	0.45	0	n/e	n/e	n/e	n/e	n/e
Job Counseling & Job Search for Inmates Leaving Prison	6	-0.039	0.023	0.006	-0.084	4.03	0.55	0	n/e	n/e	n/e	n/e	n/e
Short-Term Financial Assistance for Inmates Leaving Prison	1	-0.148	0.136	0.119	-0.415	n/e	n/e	0	n/e	n/e	n/e	n/e	n/e
Subsidized Jobs for Older Inmates Leaving Prison	1	-0.241	0.089	-0.067	-0.416	n/e	n/e	0	n/e	n/e	n/e	n/e	n/e
Moral Reconation Therapy	8	-0.078	0.046	0.012	-0.167	4.44	0.73	0	n/e	n/e	n/e	n/e	n/e
Reasoning and Rehabilitation	6	-0.074	0.043	0.011	-0.159	3.15	0.68	0	n/e	n/e	n/e	n/e	n/e
Adult Basic Education	3	-0.107	0.055	0.000	-0.214	0.39	0.82	0	n/e	n/e	n/e	n/e	n/e
Adult In-Prison Vocational Education	2	-0.134	0.037	-0.061	-0.207	0.02	0.89	0	n/e	n/e	n/e	n/e	n/e
Adult Correctional Industries	3	-0.084	0.020	-0.045	-0.124	2.18	0.34	0	n/e	n/e	n/e	n/e	n/e
Adult Boot Camps	11	-0.002	0.031	0.058	-0.062	4.64	0.91	0	n/e	n/e	n/e	n/e	n/e

Sources and Notes:

(a) The summary effect size for each area is the weighted average standardized mean difference effect size. The mean difference effect sizes for the individual studies are approximated from proportion data (dichotomous group recidivism rates) using the arcsine transformation as described in Lipsey & Wilson(2000), Table B10, Formula 22. The individual study effect sizes are adjusted using the Hedges correction for small sample sizes as described in Lipsey & Wilson(2000), page 49, Equation 3.22.

(b) The standard error of the mean weighted average effect size is from the technique described in Lipsey & Wilson(2000), page 49, Equations 3.23 and 3.24.

(c) The 95% confidence intervals around of the mean weighted average effect size is from the technique described in Lipsey & Wilson(2000), page 116; it is distributed as a chi-square with k-1 degrees of freedom where k is the number of effect sizes.

(d) The calculation of the Q statistic is described in Lipsey & Wilson(2000), page 116; it is distributed as a chi-square with k-1 degrees of freedom where k is the number of effect sizes.

(e) The summary effect size for each area is the weighted average standardized mean difference effect size. The standardized mean difference effect sizes for the individual studies is calculated with the technique described in Lipsey & Wilson(2000), page 48, Formula 3.21. The individual study effect sizes are adjusted using the Hedges correction for small sample sizes as described in Lipsey & Wilson(2000), page 49, Equation 3.22. The weights are the inverse variance weights as described in Lipsey & Wilson(2000), page 49, Equations 3.23 and 3.24.

Table VI—A (Continued)
Meta-Analytic Estimates of Standardized Mean Effect Sizes

Type of Prevention or Intervention Program	Difference in the Proportion of Offenders v. Non-Offenders (a negative ES means lower recidivism)						Difference in the Mean Number of Offenses (of the proportion that offend or re-offend)					
	Number of Effect Sizes Included in the Analysis	Mean Effect Size and Standard Error ES ^(a)	95% Confidence Interval ^(c)		Homogeneity Test ^(d)	Q	p	Number of Effect Sizes Included in the Analysis	Mean Effect Size and Standard Error ES ^(e)	95% Confidence Interval ^(c)		Homogeneity Test ^(d)
			Lower	Upper						Lower	Upper	
Juvenile Sex Offender Treatment—Primarily Cognitive-Behavioral	5	-0.123	0.104	0.081	-0.328	2.76	0.60	0	n/e	n/e	n/e	n/e
Multi-Systemic Therapy	3	-0.314	0.104	-0.111	-0.517	1.91	0.38	3	-0.414	0.104	-0.210	-0.619
Diversion with Services (vs. Regular Juvenile Court Processing)	13	-0.048	0.022	-0.006	-0.090	3.24	0.99	0	n/e	n/e	n/e	n/e
Diversion-Simple Release without Services (vs. Regular Court Processing)	7	-0.017	0.038	0.056	-0.091	0.69	0.99	0	n/e	n/e	n/e	n/e
Diversion with Services (vs. Simple Release without Services)	9	-0.007	0.035	0.062	-0.076	7.73	0.46	0	n/e	n/e	n/e	n/e
Functional Family Therapy	7	-0.254	0.096	-0.067	-0.442	2.31	0.89	1	-0.149	0.237	0.315	-0.614
Multidimensional Treatment Foster Care	2	-0.370	0.192	0.006	-0.746	0.14	0.71	2	-0.034	0.190	0.338	-0.407
Juvenile Boot Camps	10	0.100	0.042	0.181	0.018	16.88	0.05	0	n/e	n/e	n/e	n/e
National Job Corps	1	-0.079	0.029	-0.022	-0.137	n/e	n/e	0	n/e	n/e	n/e	n/e
Job Training Partnership Act	1	0.100	0.047	0.192	0.009	n/e	n/e	0	n/e	n/e	n/e	n/e
Coordinated Services	4	-0.139	0.095	0.048	-0.326	1.66	0.65	0	n/e	n/e	n/e	n/e
Scared Straight Type Programs	8	0.128	0.062	0.249	0.007	6.38	0.50	0	n/e	n/e	n/e	n/e
Aggression Replacement Training	4	-0.180	0.141	0.097	-0.457	0.26	0.97	0	n/e	n/e	n/e	n/e
Adolescent Diversion Project	5	-0.273	0.071	-0.133	-0.413	16.80	0.00	0	n/e	n/e	n/e	n/e
Juvenile Court Intensive Probation (as enhancement to regular probation)	7	-0.048	0.061	0.073	-0.168	4.28	0.64	0	n/e	n/e	n/e	n/e
Juvenile Court Intensive Probation (as alternative to incarceration)	6	-0.002	0.050	0.095	-0.099	4.89	0.43	0	n/e	n/e	n/e	n/e
Juvenile Intensive Parole Supervision (as enhancement to regular parole)	7	-0.040	0.059	0.075	-0.156	4.20	0.65	0	n/e	n/e	n/e	n/e
Early Childhood Education and Therapeutic Child Care for Disadvantaged Youth	6	-0.115	0.043	-0.031	-0.200	0.06	1.00	2	-0.165	0.129	0.088	-0.418
												0.089
												0.766

Sources and Notes:

- (a) The summary effect size for each area is the weighted average standardized mean difference effect size. The mean difference effect sizes for the individual studies are approximated from proportion data (dichotomous group recidivism rates) using the arcsine transformation as described in Lipsey & Wilson(2000), Table B10, Formula 22. The individual study effect sizes are adjusted using the Hedges correction for small sample sizes as described in Lipsey & Wilson(2000), page 49, Equation 3.22. The weights are the inverse variance weights as described in Lipsey & Wilson(2000), page 49, Equations 3.23 and 3.24.
- (b) The standard error of the mean weighted average effect size is from the techniques described in Lipsey & Wilson(2000), page 114.
- (c) The 95% confidence intervals around of the mean weighted average effect size is from the technique described in Lipsey & Wilson(2000), page 116; it is distributed as a chi-square with k-1 degrees of freedom where k is the number of effect sizes.
- (d) The calculation of the Q statistic is described in Lipsey & Wilson(2000), page 116; it is distributed as a chi-square with k-1 degrees of freedom where k is the number of effect sizes.
- (e) The summary effect size for each area is the weighted average standardized mean difference effect size. The standardized mean difference effect sizes for the individual studies is calculated with the technique described in Lipsey & Wilson(2000), page 48, Formula 3.21. The individual study effect sizes are adjusted using the Hedges correction for small sample sizes as described in Lipsey & Wilson(2000), page 49, Equation 3.22. The weights are the inverse variance weights as described in Lipsey & Wilson(2000), page 49, Equations 3.23 and 3.24.

Table IV—B
Results from Recidivism Studies of Various Populations in Washington
Recidivism Measure: New Convictions in Washington

	WSIPP Recidivism Study (2-99) of Adults Leaving Prison in 1990											
	Based on Most Serious Prior Offense					Based on the Instant Offense						
	Person Offense, Including Sex Offenses	Property Offense	Drug Offense	Sex Offense	All Offenses	All Non-Sex Offenses	Person Offense, Including Sex Offenses	Property Offense	Drug Offense	Sex Offense	All Offenses	All Non-Sex Offenses
Total Number in Study	899	932	750	467	3,048	2,581	664	1,024	942	418	3,048	2,630
Basic Recidivism Measures												
Basic Recidivism Rate	51.6%	62.6%	42.8%	27.6%	49.1%	53.0%	45.0%	63.3%	47.5%	24.6%	49.1%	53.0%
Mean Convictions for All in Group	1.11	1.51	0.83	0.47	1.07	1.17	0.91	1.54	0.96	0.37	1.07	1.18
Mean Convictions for Re-Offenders	2.14	2.42	1.94	1.71	2.17	2.21	2.02	2.44	2.03	1.50	2.17	2.22
Standard Deviation—All in Group	1.44	1.61	1.24	0.97	1.44	1.48	1.32	1.64	1.33	0.79	1.44	1.48
Standard Deviation-Re-Offenders	1.35	1.40	1.20	1.15	1.34	1.35	1.28	1.43	1.24	0.92	1.34	1.36
Recidivism By Type of Recidivism Offense												
Murder	1.1%	0.5%	0.9%	0.0%	0.7%	0.8%	1.5%	0.6%	0.6%	0.0%	0.7%	0.7%
Rape/Sex	3.3%	1.3%	1.1%	34.6%	4.2%	1.9%	3.8%	2.1%	1.2%	43.2%	3.5%	2.2%
Robbery	8.5%	4.9%	3.6%	3.4%	5.6%	5.8%	10.9%	4.7%	4.0%	4.1%	5.3%	5.7%
Aggravated Assault	13.3%	6.5%	5.7%	16.1%	9.1%	8.6%	15.8%	7.7%	5.9%	15.8%	8.6%	8.8%
Property Offenses	41.7%	63.1%	18.0%	30.2%	45.7%	46.9%	39.5%	62.9%	23.9%	23.3%	51.3%	46.9%
Drug Offenses	32.1%	23.8%	70.8%	15.6%	34.7%	36.1%	28.5%	22.1%	64.4%	13.7%	30.6%	35.8%
Misdemeanor	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Totals	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
WSIPP Recidivism Study (2-99) of Adults Placed on Community Supervision in 1990												
	Based on Most Serious Prior Offense					Based on the Instant Offense						
	Person Offense, Including Sex Offenses	Property Offense	Drug Offense	Sex Offense	All Offenses	Person Offense, Including Sex Offenses	Property Offense	Drug Offense	Sex Offense	All Offenses	Person Offense, Including Sex Offenses	
Total Number in Study	1,430	4,935	2,181	238	8,784	8,546	996	5,093	2,559	136	8,784	8,648
Basic Recidivism Measures												
Basic Recidivism Rate	42.0%	42.8%	39.9%	38.2%	41.8%	41.9%	34.1%	42.9%	43.5%	25.7%	41.8%	42.1%
Mean Convictions for All in Group	0.85	0.98	0.81	0.74	0.91	0.91	0.66	0.96	0.92	0.44	0.91	0.92
Mean Convictions for Re-Offenders	2.03	2.28	2.03	1.92	2.17	2.18	1.95	2.25	2.12	1.71	2.17	2.18
Standard Deviation—All in Group	1.31	1.52	1.30	1.26	1.43	1.44	1.19	1.50	1.38	1.05	1.43	1.43
Standard Deviation-Re-Offenders	1.30	1.56	1.32	1.37	1.46	1.47	1.28	1.54	1.36	1.45	1.46	1.46
Recidivism By Type of Recidivism Offense												
Murder	1.6%	0.6%	0.7%	1.8%	0.8%	0.8%	2.1%	0.8%	0.6%	0.0%	0.8%	0.8%
Rape/Sex	2.7%	1.8%	1.1%	21.0%	2.2%	1.8%	4.3%	2.2%	1.3%	20.3%	2.2%	2.1%
Robbery	4.7%	3.8%	2.3%	3.0%	3.6%	5.1%	3.8%	2.7%	1.7%	3.6%	3.6%	3.6%
Aggravated Assault	14.5%	8.1%	6.0%	12.6%	8.7%	8.6%	18.3%	8.5%	6.2%	20.3%	8.7%	8.6%
Property Offenses	40.6%	59.5%	19.6%	30.5%	46.8%	47.1%	35.9%	60.1%	23.5%	30.5%	46.8%	46.9%
Drug Offenses	36.0%	26.2%	70.4%	31.1%	38.0%	38.1%	34.3%	24.7%	65.7%	27.1%	38.0%	38.0%
Misdemeanor	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Totals	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table IV—B (Continued)
Results from Recidivism Studies of Various Populations in Washington
Recidivism Measure: New Convictions in Washington

	WSIPP Recidivism Study Results of Juvenile Offenders								
	Offenders in Juvenile Court			Offenders Committed to the State Juvenile Rehabilitation Administration					
Offenders Place of Probation	Offenders Placed on Diversion	Estimated High Risk Offenders Place on Probation	Estimated Low Risk Offenders Placed on Probation	Person Offense, Including Sex Offenses	Property Offense	Drug Offense	Sex Offense	All Offenses	All Non-Sex Offenses
Total Number in Study	6,917	16,532	100	100	#N/A	#N/A	#N/A	#N/A	#N/A
Basic Recidivism Measures									
Basic Recidivism Rate	46%	19%	60%	25%	#N/A	#N/A	#N/A	#N/A	#N/A
Mean Convictions for All in Group	1.12	0.37	1.76	0.50	#N/A	#N/A	#N/A	#N/A	#N/A
Mean Convictions for Re-Offenders	2.44	1.95	2.93	1.98	#N/A	#N/A	#N/A	#N/A	#N/A
Standard Deviation-All in Group	1.71	0.99	2.26	1.11	#N/A	#N/A	#N/A	#N/A	#N/A
Standard Deviation-Re-offenders	1.78	1.48	2.25	1.42	#N/A	#N/A	#N/A	#N/A	#N/A
Recidivism By Type of Recidivism Offense									
Murder	1.3%	1.4%	1.3%	1.4%	#N/A	#N/A	#N/A	#N/A	#N/A
Rape/Sex	1.3%	0.7%	1.3%	0.7%	#N/A	#N/A	#N/A	#N/A	#N/A
Robbery	7.2%	5.6%	7.2%	5.6%	#N/A	#N/A	#N/A	#N/A	#N/A
Aggravated Assault	16.7%	13.5%	16.7%	13.5%	#N/A	#N/A	#N/A	#N/A	#N/A
Property Offenses	55.0%	59.7%	55.0%	59.7%	#N/A	#N/A	#N/A	#N/A	#N/A
Drug Offenses	18.4%	19.1%	18.4%	19.1%	#N/A	#N/A	#N/A	#N/A	#N/A
Misdemeanor	0.0%	0.0%	0.0%	0.0%	#N/A	#N/A	#N/A	#N/A	#N/A
Totals	100.0%	100.0%	100.0%	100.0%	#N/A	#N/A	#N/A	#N/A	#N/A

Table IV-C
General Model Parameters

Base Year Used in the Analysis	
2000	
Age Cut-Offs:	
Maximum Age for Programs for Juveniles:	30
Maximum Age for Programs for Adults:	50
Effect Size Discounts:	
Level 5 Research Design	0%
Level 4 Research Design	25%
Level 3 Research Design	50%
Level 2 Research Design	100%
Level 1 Research Design	100%
Non "Real-World" Programs	50%
Annual Discount and Interest Rates Used in the Analysis	
Real Discount Rate	0.030
General Inflation Rate	0.030
Nominal Discount Rate ⁽¹⁾	0.061
Nominal Tax-Exempt Capital Cost	0.055
General Price Index Used in the Analysis	
Year	Chain-Weighted Implicit Price Deflator for Personal Consumption Expenditures
1961	0.223
1962	0.225
1963	0.228
1964	0.231
1965	0.234
1966	0.240
1967	0.246
1968	0.256
1969	0.267
1970	0.280
1971	0.292
1972	0.302
1973	0.319
1974	0.351
1975	0.380
1976	0.401
1977	0.427
1978	0.458
1979	0.498
1980	0.552
1981	0.601
1982	0.635
1983	0.662
1984	0.686
1985	0.710
1986	0.727
1987	0.755
1988	0.784
1989	0.819
1990	0.856
1991	0.889
1992	0.916
1993	0.938
1994	0.957
1995	0.979
1996	1.000
1997	1.019
1998	1.030
1999	1.048
2000	1.074
2001	1.098
2002	1.123

(1) Nominal discount rate set to equal $(1+\text{real discount rate}) \times (1+\text{general inflation rate}) - 1$.

Source for Price Deflator: *Washington Economic and Revenue Forecast*, Office of Forecast Council, November 2000.

Table IV-D
Estimates of Marginal Resource Operating Costs, Per Unit

Resource	Costs, Per Unit, By Type of Crime							Misdemeanor r	Year in Which Unit Cost Estimates are Based	Annual Real Cost Escalation Rate
	Units Used in Cost Estimate	Murder Man- slaughter	Rape	Robbery	Aggravated Assault	Property	Drug			
State and Local Governmental Operating Costs Paid by Taxpayers										
Police and Sheriff's Offices ⁽¹⁾	\$ Per Arrest	\$12,551	\$12,551	\$12,551	\$12,551	\$1,890	\$1,890	\$764	1995	0.0%
Superior Courts & County Prosecutors ⁽¹⁾	\$ Per Conviction	\$97,034	\$18,399	\$18,399	\$18,399	\$1,675	\$1,675	\$336	1995	0.0%
Juvenile Detention, with Local Sentence ⁽²⁾	Annual \$ Per ADP	\$30,300	\$30,300	\$30,300	\$30,300	\$30,300	\$30,300	\$30,300	1995	0.0%
Juvenile Detention, with JRA Sentence ⁽²⁾	Annual \$ Per ADP	\$30,300	\$30,300	\$30,300	\$30,300	\$30,300	\$30,300	\$30,300	1995	0.0%
Juvenile Local Probation ⁽²⁾	Annual \$ Per ADP	\$1,928	\$1,928	\$1,928	\$1,928	\$1,928	\$1,928	\$1,928	1995	0.0%
Juvenile Rehabilitation, Institutions ⁽¹⁾⁽³⁾	Annual \$ Per ADP	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	\$36,000	1996	0.0%
Juvenile Rehabilitation, Parole ⁽³⁾	Annual \$ Per ADP	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$0	1996	0.0%
Adult Jail, with Local Sentence ⁽¹⁾	Annual \$ Per ADP	\$17,047	\$17,047	\$17,047	\$17,047	\$17,047	\$17,047	\$17,047	1995	0.0%
Adult Community Supervision, Local Sentence ⁽⁴⁾⁽⁵⁾	Annual \$ Per ADP	\$2,688	\$2,688	\$2,688	\$2,688	\$2,688	\$2,688	\$0	1994	0.0%
Department of Corrections, Institutions ⁽¹⁾	Annual \$ Per ADP	\$18,400	\$18,400	\$18,400	\$18,400	\$18,400	\$18,400	\$0	1995	0.0%
Department of Corrections, Post-Prison Supervision ⁽⁴⁾⁽⁵⁾	Annual \$ Per ADP	\$2,688	\$2,688	\$2,688	\$2,688	\$2,688	\$2,688	\$0	1994	0.0%
Costs Paid by Crime Victims										
Victim Costs—Monetary, Out of Pocket Costs ⁽⁶⁾	\$ Per Crime	\$1,098,828	\$6,649	\$2,513	\$1,559	\$587	\$0	\$0	1995	0.0%
Victim Costs—Quality of Life ⁽⁶⁾	\$ Per Crime	\$2,038,965	\$88,124	\$6,221	\$8,486	\$0	\$0	\$0	1995	0.0%

Sources and Notes:

- (1) Costs estimated by the Washington State Institute for Public Policy using expenditure and workload data for jurisdictions in Washington. See Table 5.
- (2) Washington State Institute for Public Policy, *Washington State Juvenile Courts: Workloads and Costs*, April 1997.
- (3) Washington State Senate Ways and Means Committee, *Roundtable Discussion on Criminal Justice Funding Issues*, January 28, 1997, page 7.
- (4) State of Washington Sentencing Guidelines Commission, *Criminal Justice in Washington State*, January 1995, page 39. This is for "Level One" community supervision, custody, and placement.
- (5) Communication with staff at the Washington Department of Corrections.
- (6) Communication with Ted Miller, National Public Services Research Institute. Victim costs per violent crime for Washington State in 935 dollars. Monetary victim costs include the categories of medical spending, mental health payments, future earnings, and property damage, less public programs. Quality of life victim costs are computed from jury awards for pain, suffering, and lost quality of life; for murders, the victim quality of life value is estimated from the amount people spend to reduce risks of death. See, *Victim Costs and Consequences: A New Look*, U.S. Dept. of Justice, 1996.

Table IV-E
Resource Capital Cost Estimates

Generic Capital Resource	Capital Costs of Resource				Financing Assumptions				Calculated Cost-Per-Unit Estimates			
	Units Used In Cost Estimate (see Sources Below)	Total Capital Costs (see Sources Below)	Year in Which Costs are Estimated	Capital Costs in Base Year Dollars	Capital Costs Per Unit in Base Year Dollars	Number of Years Over Which Capital is Financed	Real Tax-Exempt Financing Rate	Leveled Annual Payment	Real Payment Rate	Annual Nominal Capital Cost Per Unit, in Base Year Dollars	Annual Real Capital Cost Per Unit, in Base Year Dollars	
Police Capital Expenditures ⁽¹⁾	322,233 arrests	\$32,325,999	1992	\$37,901,881	\$118	5	5.50%	2.41%	\$8,875,727	\$8,137,136	\$28	\$25
Local Juvenile Detention Facility ⁽²⁾	80 beds	\$10,930,275	1995	\$11,990,925	\$149,887	20	5.50%	2.41%	\$1,003,393	\$762,659	\$12,542	\$9,533
State Juvenile Rehabilitation Facility ⁽³⁾	64 beds	\$4,635,000	1997	\$4,885,172	\$76,331	25	5.50%	2.41%	\$364,186	\$292,425	\$5,690	\$4,100
Local Adult Jail Facility ⁽⁴⁾	288 beds	\$11,248,200	1995	\$12,339,701	\$42,846	20	5.50%	2.41%	\$1,032,578	\$784,843	\$3,585	\$2,725
State Department of Corrections Facility ⁽⁵⁾	1,936 beds	\$191,485,235	1998	\$199,665,187	\$103,133	25	5.50%	2.41%	\$14,884,910	\$10,725,765	\$7,688	\$5,540

Sources for Capital Cost Estimates:

(1) U.S. Department of Justice, Bureau of Justice Statistics, *Justice Expenditure and Employment Extracts*, 1992, NCJ-148621.

(2) Based on the Thurston County Cost Model for a new 80 bed single story detention facility without a family court.

(3) Discussion with Staff at the House Capital Budget Committee. The estimate assumes construction of a capital addition to an existing facility, not a new stand-alone facility.

(4) Based on cost estimates prepared for a new county minimum security facility in Thurston County.

(5) Legislative Budget Committee, Department of Corrections Privatization Feasibility Study, Report 96-2, pages A6-4 and A6-5.

Table IV-F
Procedures Used to Estimate Marginal Operating Costs

Resource	Procedure & Data Used to Estimate Marginal Operating Cost	Final Estimated Equation (t-statistics below the coefficients in equations)	Dependent Variable	Independent Variables
Police and Sheriff's Offices	Pooled cross-sectional regression for 1994 and 1995 for jurisdictions in Washington; 1994 costs escalated to 1995 dollars with IPD.	$\ln(\text{Oper. Exp.}) = 9.55 + .212\ln(FVA) + .181\ln(nFVA) + .266\ln(nFA) + .203\ln(TR)$ R2Adj=.84 N=341	Data from the State Auditor include all Law Enforcement expenses except Gambling Enforcement and DARE subcategories.	Felony violent arrests (FVA), felony non-violent arrests (nFVA), non-felony arrests (nFA), and traffic infraction filings (TR). Arrest data from WASPC, traffic data from OAC.
Superior Courts & Prosecutors	Pooled cross-sectional regression for 1994 and 1995 for counties in Washington; 1994 costs escalated to 1995 dollars with IPD.	$\ln(\text{Oper. Exp.}) = 9.80 + .160\ln(H) + .174\ln(S+R+A) + .247\ln(NVF) + .322\ln(CSFC)$ R2Adj=.94 N=74	All Superior Court expenditures except those for district court, family court fees, law library, and municipal court. All prosecutor costs except those for civil, traffic, consumer affairs, and child support enforcement. Data from the State Auditor.	Adult and juvenile convictions for homicide (H); sex offenses (S), robbery (R), aggravated assaults (A); non-violent felonies (N VF); and non criminal superior court filings (NCSCF). Data from OAC.
Local Juvenile Detention Facilities	Cross-sectional regression for 1995	$\ln(\text{Oper. Exp.}) = 10.38 + .987\ln(ADP)$ R2Adj=.89 N=18	Data from Washington State Institute for Public Policy survey of juvenile courts in Washington.	Data from Washington State Institute for Public Policy survey of juvenile courts in Washington.
Local Adult Jails	Pooled cross-sectional regression for 1990 to 1995. Pre-1995 costs escalated to 1995 with IPD.	$\ln(\text{Oper. Exp.}) = 9.938 + .9479\ln(ADP)$ R2Adj=.93, N=194	Data from the State Auditor include all operating expenses of local jails except probation and parole costs.	Jail average daily population data from the Washington Association of Sheriffs and Police Chiefs (WASPC).
Juvenile Rehabilitation Institutions	Time series regression with annual data for 1984 to 1996. Model was run in log and non-log form with similar results. Dollars converted to 1996 dollars with IPD.	Inst. Oper. Exp. = $9.863, 961 + 35.974 \cdot (\text{Institutional ADP})$ R2Adj=.96, N=13	Data from the Juvenile Rehabilitation Administration include all institutional operating expenses.	Data from the Juvenile Rehabilitation Administration for institutional average daily population.
Dept. of Corrections, Institutions	Time series regression with annual data for 1984 to 1996. Dollars converted to 1995 dollars with IPD.	Inst. Oper. Exp. = $57,299,937 + 20.447 \cdot (\text{Inst. ADP}) - 19,999(\text{ADP-Capacity})$ R2Adj=.98, N=13	Data from the Department of Corrections include all institutional operating expenses.	Data from the DOC for all institutional average daily population, and average daily population minus average institutional capacity.

Table IV—G
Adult Sentence and Resource Use Information

Crime	State Prison and Local Resource Use for Adult Offenders, by Type of Crime			Sentenced to Prison	Sentenced to Local Sanction			
	Sentence Outcome	Percent Receiving Prison Sentence ⁽¹⁾	Average Prison Sentence, In Years ⁽¹⁾	Average Prison Length of Stay, In Years ⁽²⁾	Post-Prison Supervision, In Years ^{(2), (3)}	Average Jail Length of Stay (Prior to Prison), in Years ⁽²⁾	Average Jail Length of Stay, in Years ⁽¹⁾	Community Supervision Length of Stay, in Years ⁽²⁾
Murder/Manslaughter	98%	2%	21.0	18.0	3.0	0.70	0.80	1.00
Rape	44%	56%	7.9	6.9	3.0	0.44	0.33	2.00
Robbery	70%	30%	5.7	4.4	2.0	0.29	0.47	1.00
Aggravated Assault	34%	66%	3.6	2.9	2.0	0.30	0.34	1.00
Property	24%	76%	2.4	1.7	0.0	0.19	0.22	1.00
Drug	31%	69%	2.9	2.1	1.0	0.19	0.21	1.00
Misdemeanor	0%	100%	0.0	0.0	0.0	0.00	0.25	0.50

Sources and Notes:

(1) Estimates derived from *Statistical Summary of Adult Felony Sentencing, Fiscal Year 1999*, State of Washington Sentencing Guidelines Commission, Table 1.

(2) Estimates from information from the Washington State Department of Corrections.

(3) From *Adult Sentencing Manual 1996*, State of Washington Sentencing Guidelines Commission, page I-23.

Table IV—H
Juvenile Sentence and Resource Use Information

Crime	Juvenile Court Jurisdiction	State Institution & Local Resource Use for Juvenile Offenders, by Type of Crime			Committed to Local Sanction	
		Outcome of Adjudication	Percent Committed to JRA ⁽¹⁾	JRA Length of Stay, In Years ⁽¹⁾	Detention Length of Stay, In Years ⁽²⁾	
Murder/Manslaughter	15	70%	30%	1.87	0.46	0.021
Rape	15	60%	40%	0.72	2.00	0.021
Robbery	15	64%	36%	1.22	0.31	0.021
Aggravated Assault	17	67%	33%	0.90	0.31	0.021
Property	17	9%	91%	0.40	0.23	0.021
Drug	17	27%	73%	0.51	0.23	0.021
Misdemeanor	17	0%	100%	0.00	0.00	0.000

Sources and Notes:

(1) From *Washington State Juvenile Rehabilitation Institutional Population Forecast*, Washington State Office of Financial Management.

(2) Estimates from information from the Washington State Juvenile Rehabilitation Administration.

(3) Washington State Institute for Public Policy, *Washington State Juvenile Courts: Workloads and Costs*, April 1997. Survey data were not collected by offense type, therefore average data for all offenses are used in this analysis.

Table IV—I
**Estimated Probability of Arrest and Conviction in Washington,
For Use in the WSIPP Cost-Benefit Model**

Crime	Estimated Total Number of Crimes, by Type, in Washington, 1998			Estimated Probability of Arrest			Estimated Probability of Conviction		
	Crimes ^(a) Reported to Police, 1998, Washington	Adjusted Crimes	Adjusted [Column(1)* Column(2)]	Percent ^(d) of Crime Reported to Police, 1998	Estimated Total Crimes [Column(3)/ Column(4)]	Arrests, ^(e) Juvenile and Adult, in 1998	[Column(6)/ Column(5)]	Felony ^(g) Convictions, Juvenile and Adult, in 1998	[Column(8)/ Column(5)]
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Murder	224	1.00	224	100.0%	224	204	91.1%	222	99.1%
Rape, Sex Offenses	2,740	1.67 ^(b)	4,562	31.6%	14,437	2,857	19.8%	1,543	10.7%
Robbery	6,577	1.00	6,577	62.0%	10,608	2,172	20.5%	1,109	10.5%
Assault	14,839	1.00	14,839	57.6%	25,762	6,400	24.8%	4,105	15.9%
Property Subtotal	309,419	n/a	179,921	n/a	455,139	26,656	5.9%	12,717	2.8%
Burglary	60,446	1.00	60,446	49.4%	122,360	7,405	6.1%	n/a	n/a
Larceny	213,773	0.39 ^(c)	84,275	29.2%	288,613	16,033 ^(e)	5.6%	n/a	n/a
Auto theft	35,200	1.00	35,200	79.7%	44,166	3,218	7.3%	n/a	n/a
Drug Dealing	n/a	n/a	n/a	n/a	n/a	4,923 ^(f)	0.1%	3,988 ^(h)	0.1% ⁽ⁱ⁾
Misdemeanor1	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Misdemeanor2	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
					506,170			19,696	

Sources and Notes:

- (a) FBI, *Uniform Crime Reports*, available at <http://www.ojp.usdoj.gov/bjs/dataset.htm>
- (b) This adjustment modifies the FBI UCR "rape" definition to add an estimated number of other sexual assaults. The ratio is total number of criminal victimizations (United States) in 1998 for "rapesexual assault" divided by the number of "rapeattempted rape" victimizations, from Table 1 of the National Crime Victimization Survey, *Criminal Victimization 1998*, U.S. Department of Justice, Bureau of Justice Statistics, Washington, DC.
- (c) This adjustment estimates the portion of larceny/theft crimes that are felonies, to make the definition more compatible with Washington State's definition of felony convictions for theft (in column 8). The number is the the number of thefts for greater than \$200 as a percent of all thefts. Source: Crime in Washington Annual Report 1997, Washington Association of Chiefs of Police.
- (d) *National Crime Victimization Survey, Criminal Victimization 1998*, U.S. Department of Justice, July 1999. The reporting rate for murder was set to 100%.
- (e) Arrest totals from The Washington State Caseload Forecast Council (CFC), available at <http://www.wa.gov/cfc/CaseloadForecast.htm>. The CFC adjusts the data on arrests to account for non-reporting jurisdictions in Washington. Special Note: the arrest total for larceny, as reported by the CFC, is reduced to remove an estimated portion of larceny arrests that are misdemeanors—the adjustment factor is reported in column (2) of this table for larceny.
- (f) The estimate of felony drug dealing arrests is made by multiplying the total number of arrests for drug abuse offenses as reported by the FBI's Uniform Crime Report for 1998 for Western States (available at: http://www.fbi.gov/ucr/cius_98/Bcrma/98cuis22.pdf at page 209, table 4.1).
- (g) Washington State Office of the Administrator for the Courts, available at http://www.wa.gov/courts/case_id98/jfcfcytr.htm (for juvenile convictions) and http://www.wa.gov/courts/case_id98/sup/crmcytr.htm (for adult convictions).
- (h) The estimate of felony drug dealing convictions is made by multiplying the total number of felony convictions for controlled substances in Washington (see note (g)) by the ratio of drug dealing convictions to total drug convictions for adult offenders. The last percentage is taken from *Statistical Summary of Adult Felony Sentencing FY 1998* published by the Washington Sentencing Guidelines Commission, Table 6, page 15.
- (i) The estimated probabilities of arrest and conviction for drug dealing offenses are computed by assuming that each felony arrest or conviction is associated with 800 drug dealings. The 800 estimate is taken as a representative number from the survey reported in Pielh, A., M., Unseem, B., & Duijio, J., J., (1999), Right-Sizing Justice: A Cost-Benefit Analysis of Imprisonment in Three States, Manhattan Institute.

Table IV—J
Incremental Program Costs—Estimates Used in the Cost-Benefit Analysis

Type of Prevention or Intervention Program	Program Group Treatment Cost			Comparison Group Treatment Cost			Note
	Cost per Program Participant	Year Dollars are Denominated	Number of Years Dollars Incurred	Cost per Program Participant	Year Dollars are Denominated	Number of Years	
Adult In-Prison Therapeutic Community without Community Aftercare	\$2,604	2000	1	\$0	2000	1	This cost estimate assumes a 11-month TC program at an incremental \$9/day (beyond normal incarceration costs); a 75% TC graduation rate and, of the non-graduates, that they complete 46% of the program before dropping out.
Adult In-Prison Therapeutic Community with Community Aftercare	\$3,100	2000	1	\$0	2000	1	This cost estimate assumes a 11-month TC program at an incremental \$9/day (beyond normal incarceration costs); an 87% graduation rate and, of the non-graduates, that they complete 46% of the program before dropping out. Full aftercare is estimated to cost \$1350, with 50% of TC graduates participating in AC, 43% completing AC and, of the AC non-completers, that they complete 0% of the program before dropping out.
Non-Prison Therapeutic Community	\$1,964	1999	1	\$0	1999	1	This cost estimate assumes a 6-month community TC program at an incremental \$9/day (beyond the costs of a normal work release facility); a 65% completion rate and, of the non-completers, that they complete 25% of the program before dropping out.
Adult Drug Courts	\$2,500	1999	1	\$0	1998	1	This is an estimate of the incremental costs for a drug court participant vs. regular court processing, based on numbers from the Bell(98), Spokane(99), and Finigan(99) studies.
Adult In-Prison Non-residential Substance Abuse Treatment	\$1,500	2000	1	\$0	2000	1	This estimate assumes a 3 month in-prison outpatient program at \$500 per month. The estimate is based on a range of values reported in French et al. (2000), Anderson et al. (1998), Du & Phipps (1997).
Adult Community-Based Substance Abuse Treatment	\$1,875	1992	1	\$0	1992	1	This cost estimate assumes 25 sessions at \$75 per session.
Adult Offender Case Management Substance Abuse Programs	\$1,964	1994	1	\$0	1994	1	Cost estimate based on WSIPP analysis of Anglin(99).
Adult Intensive Supervision: Surveillance-Oriented Enhancements to Probation/Parole	\$3,217	1999	1	\$0	1999	1	The cost estimate is for the incremental costs of ISP (beyond normal supervision costs), based on WSIPP analysis of RAND ISP and APPA cost studies.
Adult Intensive Supervision: Treatment-Oriented Enhancement to Probation/Parole	\$3,718	1999	1	\$0	1999	1	The cost estimate is for the incremental costs of ISP (beyond normal supervision costs), based on WSIPP analysis of RAND ISP and APPA cost studies.
Adult Intensive Supervision: Surveillance-Oriented Diversion from Prison	-\$5,782	1999	1	\$0	1999	1	The cost estimate is for the incremental costs of ISP (beyond normal supervision costs), based on WSIPP analysis of RAND ISP and APPA cost studies.
Adult Cognitive-Behavioral Sex Offender Treatment with (or without) Relapse Prevention	\$6,246	2000	1	\$0	1998	1	This is an estimate of Washington State's sex offender treatment cost per person.
Adult Drug Treatment Programs in Jails	\$999	1992	1	\$0	1992	1	This estimate of the incremental costs for a drug treatment program in jails is based on WSIPP analysis of Peters(93), Dugan(98), Tunis (96).
Work Release Programs	\$25,883	1992	1	\$25,494	1992	1	These cost estimates are those reported by Turner(96) for the Washington State work release study.
Job Counseling & Job Search for Inmates Leaving Prison	\$615	1990	1	\$0	1990	1	This cost estimate is based on WSIPP analysis of Project Rio in Texas as reported in Menon(95).
Short-term Financial Assistance for Inmates Leaving Prison	\$966	1975	1	\$0	1975	1	This cost estimate is based on WSIPP analysis of Berk(80) and Maller(78).
Subsidized Jobs for Older Inmates Leaving Prison	\$10,000	1997	1	\$0	1997	1	This cost estimate is based on WSIPP analysis of Uggen(97).
Moral Reconation Therapy	\$297	1998	1	\$0	1998	1	This cost estimate assumes 62 sessions at 2 hours per session (plus 1/2 hour preparation time per person) valued at the hourly cost of a community corrections officer II in Washington, with the MRT intervention given to groups of 12 offenders.
Reasoning and Rehabilitation	\$296	1998	1	\$0	1998	1	This cost estimate assumes 36 sessions at 2 hours per session (plus 1/2 hour preparation time per person) valued at the hourly cost of a community corrections officer II in Washington, with the R&R intervention given to groups of 7 offenders.
Adult Basic Education	\$1,871	1997	1	\$0	1997	1	This cost estimate is based on a fiscal analysis of Washington's ABE program.
Adult In-Prison Vocational Education	\$1,859	1997	1	\$0	1997	1	This cost estimate is based on a fiscal analysis (by JLARC) of Washington's in-prison vocational education program.
Adult Correctional Industries	\$1,800	2000	1	\$0	2000	1	This cost estimate is based on a fiscal analysis of Washington's correctional industries program.
Adult Boot Camps	\$14,271	1995	1	\$23,136	1995	1	This cost estimate is based on a fiscal analysis of Washington's adult boot camp program, assuming no prison "net widening."
Adult Boot Camps--As a Partial Diversion from Regular Incarceration	\$14,271	1995	1	\$17,352	1995	1	This cost estimate is based on a fiscal analysis of Washington's adult boot camp program, assuming 25% prison "net widening."
Juvenile Sex Offender Treatment--Primarily Cognitive-Behavioral	\$9,920	2000	1	\$0	2000	1	WSIPP
Multi-Systemic Therapy	\$5,000	1997	1	\$500	1997	1	WSIPP interpretation of MST costs less immediate probation service provision costs avoided when a juvenile goes into MST.
Diversion with Services (vs. Regular Juvenile Court Processing)	\$400	1997	1	\$500	1995	1	WSIPP interpretation of typical diversion services costs and typical probation costs.
Diversion-Simple Release without Services (vs. Regular Court Processing)	\$100	1997	1	\$500	1995	1	WSIPP interpretation of typical diversion costs and typical probation costs.
Diversion with Services (vs. Simple Release without Services)	\$400	1997	1	\$100	1997	1	WSIPP interpretation of typical diversion services costs and typical probation costs.
Functional Family Therapy	\$2,550	1997	1	\$500	1997	1	WSIPP interpretation of FFT costs less immediate probation service provision costs avoided when a juvenile goes into FFT.
Multidimensional Treatment Foster Care	\$18,394	1997	1	\$16,625	1998	1	This is a WSIPP estimate of the costs of MTFC vs. the costs of regular group home care.
Juvenile Boot Camps	\$30,457	1999	1	\$45,508	1999	1	WSIPP estimate based on Peters (97) and LEAD (97) costs.
National Job Corps	\$11,111	1999	1	\$5,136	1999	1	This is a preliminary cost estimate based on information in Schochet(00).
Job Training Partnership Act	\$2,740	1989	1	\$1,649	1989	1	Cost estimates based on Bloom(94).
Coordinated Services	\$572	1997	1	\$0	1997	1	This is a WSIPP estimate based on information in Ezell(97) and Tolan (87).
Scared Straight Type Programs	\$50	1999	1	\$0	1999	1	The Institute assumed a nominal amount of incremental program cost per participant.
Aggression Replacement Training	\$900	1997	1	\$200	1997	1	WSIPP interpretation of ART costs less immediate probation service provision costs avoided when a juvenile goes into ART.
Adolescent Diversion Project	\$1,600	1997	1	\$500	1995	1	WSIPP interpretation of ADP costs less immediate diversion service provision costs avoided when a juvenile goes into ADP.
Juvenile Court Intensive Probation (as enhancement to regular probation)	\$3,128	1995	1	\$1,091	1995	1	Based on 1995 WSIPP survey of Washington juvenile courts, estimated ISP caseloads of 15 compared to 43 for regular probation.
Juvenile Court Intensive Probation (as alternative to incarceration)	\$3,128	1995	1	\$20,400	1996	1	WSIPP estimate, from survey of WA juvenile courts and estimated institutional costs, assuming 6.8 months on ISP, vs 6.8 months in an institution.
Juvenile Intensive Parole Supervision (as enhancement to regular parole)	\$2,500	1997	1	\$0	1997	1	WSIPP
Early Childhood Education and Therapeutic Child Care for Disadvantaged Youth	\$8,321	1996	1	\$0	1996	1	This is a weighted average present value cost from data in Schweinhart(93), Reynolds(97), and Lally(87).
Nurse Home Visitation	\$3,000	1997	2.5	\$0	1997	1	This estimate is from the Blueprint, averaging the \$2800 and \$3000 figures.
Children At Risk Program	\$4,700	1995	1	\$0	1995	1	Cost estimate based on Harrell(99).

Appendix J(2)
Program-Level Parameters in the Cost-Benefit Model

Type of Prevention or Intervention Program	Age of Participant Parameters				Crime Distribution Parameters					Other Parameters			
	Typical Age of Program Participant	Follow-up Age	Extension Factor	Juvenile or Adult	Distribution Number	Age Distribution Number	Crime Type Dist Method	AARG	Bivariate Method	Mean Number Method	Felony Scalar	Arrest/Conviction Multiple	Cost Adjustment
Adult In-Prison Therapeutic Community without Community Aftercare	30	38	0.898	A	8	6	2	0.00	2	2	1.00	2	0.90
Adult In-Prison Therapeutic Community with Community Aftercare	30	38	0.898	A	8	6	2	0.00	2	2	1.00	2	0.90
Non-Prison Therapeutic Community	30	38	0.898	A	8	6	2	0.00	2	2	1.00	2	0.90
Adult Drug Courts	30	38	0.898	A	48	7	2	0.00	2	2	1.00	2	0.90
Adult In-Prison Non-residential Substance Abuse Treatment	30	38	0.898	A	8	6	2	0.00	2	2	1.00	2	0.90
Adult Community-Based Substance Abuse Treatment	30	38	0.898	A	39	7	2	0.00	2	2	1.00	2	0.90
Adult Offender Case Management Substance Abuse Programs	30	38	0.898	A	39	7	2	0.00	2	2	1.00	2	0.90
Adult Intensive Supervision: Surveillance-Oriented Enhancements to Probation/Parole	30	38	0.898	A	38	6	2	0.00	2	2	1.00	2	0.90
Adult Intensive Supervision: Treatment-Oriented Enhancement to Probation/Parole	30	38	0.898	A	38	6	2	0.00	2	2	1.00	2	0.90
Adult Intensive Supervision: Surveillance-Oriented Diversion from Prison	30	38	0.898	A	8	6	2	0.00	2	2	1.00	2	0.90
Adult Cognitive-Behavioral Sex Offender Treatment with (or without) Relapse Prevention	30	38	0.898	A	22	6	1	0.00	2	2	1.00	2	0.90
Adult Drug Treatment Programs in Jails	30	38	0.898	A	48	6	2	0.00	2	2	1.00	2	0.90
Work Release Programs	30	38	0.898	A	8	6	2	0.00	2	2	1.00	2	0.90
Job Counseling & Job Search for Inmates Leaving Prison	30	38	0.898	A	8	6	2	0.00	2	2	1.00	2	0.90
Short-term Financial Assistance for Inmates Leaving Prison	30	38	0.898	A	8	6	2	0.00	2	2	1.00	2	0.90
Subsidized Jobs for Older Inmates Leaving Prison	30	38	0.898	A	8	6	2	0.00	2	2	1.00	2	0.90
Moral Reconation Therapy	30	38	0.898	A	8	6	2	0.00	2	2	1.00	2	0.90
Reasoning and Rehabilitation	30	38	0.898	A	39	6	2	0.00	2	2	1.00	2	0.90
Adult Basic Education	30	38	0.898	A	8	6	2	0.00	2	2	1.00	2	0.90
Adult In-Prison Vocational Education	30	38	0.898	A	8	6	2	0.00	2	2	1.00	2	0.90
Adult Correctional Industries	40	48	0.992	A	23	6	2	0.00	2	2	1.00	2	0.90
Adult Boot Camps	22	30	0.735	A	21	6	2	0.00	2	2	1.00	2	0.90
Juvenile Sex Offender Treatment—Primarily Cognitive-Behavioral	15	22	0.667	J	63	2	2	0.00	2	2	1.00	2	0.90
Multi-Systemic Therapy	15	22	0.667	J	55	2	2	0.00	2	2	1.00	2	0.90
Diversion with Services (vs. Regular Juvenile Court Processing)	14	21	0.616	J	54	2	2	0.00	2	2	1.00	2	0.90
Diversion-Simple Release without Services (vs. Regular Court Processing)	14	21	0.616	J	54	2	2	0.00	2	2	1.00	2	0.90
Diversion with Services (vs. Simple Release without Services)	14	21	0.616	J	54	2	2	0.00	2	2	1.00	2	0.90
Functional Family Therapy	15	22	0.667	J	53	2	2	0.00	2	2	1.00	2	0.90
Multidimensional Treatment Foster Care	15	22	0.667	J	55	2	2	0.00	2	2	1.00	2	0.90
Juvenile Boot Camps	15	22	0.667	J	53	2	2	0.00	2	2	1.00	2	0.90
National Job Corps	17	24	0.761	J	54	2	2	0.00	2	2	1.00	2	0.90
Job Training Partnership Act	17	24	0.761	J	54	2	2	0.00	2	2	1.00	2	0.90
Coordinated Services	14	21	0.616	J	54	2	2	0.00	2	2	1.00	2	0.90
Scared Straight Type Programs	15	22	0.667	J	53	2	2	0.00	2	2	1.00	2	0.90
Aggression Replacement Training	15	22	0.667	J	53	2	2	0.00	2	2	1.00	2	0.90
Adolescent Diversion Project	14	21	0.616	J	54	2	2	0.00	2	2	1.00	2	0.90
Juvenile Court Intensive Probation (as enhancement to regular probation)	15	22	0.667	J	53	2	2	0.00	2	2	1.00	2	0.90
Juvenile Court Intensive Probation (as alternative to Incarceration)	16	23	0.715	J	55	2	2	0.00	2	2	1.00	2	0.90
Juvenile Intensive Parole Supervision (as enhancement to regular parole)	16	23	0.715	J	55	2	2	0.00	2	2	1.00	2	0.90
Other Juvenile Institutional-Based Treatments	16	22	0.667	J	53	2	2	0.00	2	2	1.00	2	0.90
Wilderness Programs	16	22	0.667	J	53	2	2	0.00	2	2	1.00	2	0.90
Other Family-Based Therapy Approaches	15	22	0.667	J	53	2	2	0.00	2	2	1.00	2	0.90
Structured Restitution for Juvenile Offenders (vs regular court programming)	15	22	0.667	J	53	2	2	0.00	2	2	1.00	2	0.90
Early Childhood Education and Therapeutic Child Care for Disadvantaged Youth	4	27	0.913	J	61	1	2	0.00	2	2	0.38	1	0.90
Children At Risk Program	12	19	0.505	J	54	2	2	0.00	2	2	1.00	2	0.90
Seattle Social Development Project	6	18	0.435	J	54	2	2	0.00	2	2	1.00	2	0.90
Quantum Opportunities Program	14	21	0.616	J	54	3	2	0.00	2	2	1.00	2	0.90

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#N/A #N/A

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Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects

Notes to Information Listed: The "Design Score" is a measure of the overall level of confidence that can be placed in the findings based on how the evaluation was designed—a "5" is the highest score, "1" is the lowest. "Researcher Role" is whether the program was carried out by the developer (1) or whether it was a "real world" program (0). "N(Prog)" and "N(Comp)" are the numbers in the treatment and comparison groups. "Follow-up (yrs)" is the follow up time in years. "Crime Outcome" is a code for the type of recidivism measure used in the study. "ES*" is the mean difference effect size approximated from proportion data (dichotomous group recidivism rates) using the arcsine transformation and adjusted using the Hedges correction for small sample sizes as described in Lipsey & Wilson (2000). "AdjES" is the institute-adjusted effect size; p is the significance level; and "Sig" indicates significance levels ($NS=p>.10$; $S^* = p>.05$; $S^{**} = p<.01$; $S^{***} = p<.001$).

	Research Design Information	Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)			Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)					
		Design Score	N (Prog)	N (Comp)	Follow-up (yrs)	Crime Outcome	ES	AdjES	p	Sig
Adult In-Prison Therapeutic Community without Community Aftercare										
Wexler, H. K., Falkin, G. H., Lipton, D. S., Rosenblum, A. B. (1992). "Outcome Evaluation of a Prison Therapeutic Community for Substance Abuse Treatment," pp. 156-174 in Carl G. Leukefeld and Frank M. Tims (eds.), Drug Abuse Treatment in Prisons and Jails. NIDA Research Monograph 118, Rockville, MD: NIDA. This research reports the results of the Stay n'Out Program in New York. The comparison reported here is the male TC participants vs. the no treatment control group (volunteers put on a waiting list); the two groups matched fairly well. The Institute adjusted the result of the no treatment group to account for their longer time at risk.	3	0	435	159	2.9	At	-0.16	-0.08	.07	S*
Oregon Department of Corrections. (1996). Evaluation of the Powder River and Turning Point Alcohol and Drug Treatment Programs, Salem, OR. This study reports the evaluation results for the Powder River TC for men in Oregon. The treatment group studies were those participants with greater than 30 days of treatment vs. a comparison group well-matched on six recidivism-related factors.	3	0	144	142	3.0	Ct	-0.04	-0.02	.73	NS
Oregon Department of Corrections. (1996). Evaluation of the Powder River and Turning Point Alcohol and Drug Treatment Programs. Salem, OR. This study reports the evaluation results for the Turning Point TC in Oregon. The treatment group studies were those participants with greater than 30 days of treatment vs. a comparison group well-matched on six recidivism-related factors. The result shown here is for male and females combined.	3	0	206	196	3.0	Ct	0.02	0.01	.87	NS
Taxman, Fayle S., and David L. Spivner. (1997). "Jail Addiction Services (JAS) Demonstration Project in Montgomery County, Maryland: Jail and Community Based Substance Abuse Treatment Program Model." University of Maryland, College Park. This study reports the results of an evaluation of a jail-based modified-TC program in Montgomery County Maryland. About 47% of the TC participants in the program also received community aftercare. The comparison group, matched on several variables, did not participate in the programs. Some differences were found on drug history and type of prior offenses (the comparison group had more drug history and a higher percentage of non-traffic offenses). The result reported here is from the multivariate analysis conducted to control for these differences in those receiving only TC, but no community treatment.	3	0	181	155	2.0	At	-0.27	-0.13	.01	S**
Gransky, Laura A., and Jones, Robert J. (1995). "Evaluation of the Post-Release Status of Substance Abuse Program Participants." Illinois Criminal Justice Authority Report. This research reports the results of the Dwight Gateway TC program for female offenders in Illinois. Participants in the program vs. a matched comparison group who volunteered for the program but were unable to be places due to lack of slots. No information was provided on how well they matched.	3	0	168	247	2.0	Rei	-0.02	-0.01	.83	NS
Martin, S. S., Butzin, C. A., Saum, C. A., Indardi, J. A. (1999). "Three-year outcomes of therapeutic community treatment for drug-involved offenders in Delaware: From prison to work release to aftercare." The Prison Journal 79(3): 294-320. This study reports the evaluation results of the KEY TC in Delaware (which also has a work-release aftercare model, not reported here). In the study, the KEY group is composed only of program graduates. This group is compared to a matched group of offenders who went into a conventional work-release program following a non-TC prison stay. The result reported here is from the authors multivariate logistic regression analysis that attempts to control for pre-existing differences.	Lt3	0	38	165	3.0	Aisr	-	-	-	-
Hartmann, David J., Wolk, James L., Johnson, J. Scott, and Colver, Corey J. (1997). "Recidivism and Substance Abuse Outcomes in a Prison-Based Therapeutic Community." Federal Probation 61: 18-25. This study reports the evaluation results for the Okarks Correctional Center Drug Treatment Program in Missouri. This evaluation in preliminary and studies program graduates only, with a 3 month follow-up.	Lt3	0	-	-	-	-	-	-	-	-
Prendergast, M. L., Wallisch, J., and Wong, M. M. (1996). "Residential Treatment for Women Parolees Following Prison-Based Drug Treatment: Treatment Experiences, Needs and Services, Outcomes." The Prison Journal 76 (3):253-274. The study reports the results from a TC program at the California Institute for Women for offenders who completed the program vs. women who volunteered for the program but did not enter the program. The result reported here estimates the effect of the program for new offenders leading to reincarceration.	Lt3	0	23	22	1.0	Rc	-	-	-	-
Adult In-Prison Therapeutic Community with Community Aftercare										

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information	Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)	Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)
	Design Score Researcher Role N (Prog) N (Comp) Follow-up (yrs) Crime Outcome	ES AdjES P Sig	ES AdjES P Sig
Notes to Information Listed: The "Design Score" is a measure of the overall level of confidence that can be placed in the findings based on how the evaluation was designed—a "5" is the highest score, "1" is the lowest. "Researcher Role" is whether the program was carried out by the developer (1) or whether it was a "real world" program (0). "N(Prog)" and "N(Comp)" are the numbers in the treatment and comparison groups. "Follow-up (yrs)" is the follow up time in years. "Crime Outcome" is a code for the type of recidivism measure used in the study. "ES" is the mean difference effect size approximated from proportion data (dichotomous group recidivism rates) using the arcsine transformation and adjusted using the Hedges correction for small sample sizes as described in Lipsey & Wilson (2000). "AdjES" is the institute-adjusted effect size. p is the significance level, and "Sig" indicates significance levels (NS=p>.10; S**=p>.05; S***=p<.01).			
Wexler, H. K., Melnick, G., Lowe, L., Peters, J. (1999). "Three-year reincarceration outcomes for adult in-prison therapeutic community and aftercare in California." <i>The Prison Journal</i> 79(3): 321-336. This study reports the results of the Armity TC in California which has a TC aftercare model. Random assignment was used for those participating in the in-prison TC program vs. those not entering the prison-based TC. Some of the prison-based TC completers then completed a post-prison aftercare TC program and some didn't. The results reported here combine the aftercare TC completers and dropouts, and the results include the prison TC dropouts who did not participate in the community TC.	5 0 289 189 3.0 Rei	-0.14 -0.14 .14 NS	- - -
Rhodes, W., Pelissier, B., Gaez, G., Saylor, W., Camp, S., and Wallace, S. (1998). "BOP TRIAD drug treatment evaluation three-year outcome report, executive summary." Federal Bureau of Prisons, Office of Research and Evaluation. <i>Forthcoming in Evaluation Review.</i> The results reported here combine males and females and use the authors' instrumental variables method to adjust from sample selection bias.	4 0 1079 1122 3.0 At	-0.11 -0.08 .01 S**	- - -
Taxman, Faye S., and David L. Spinner. (1997). "Jail Addiction Services (JAS) Demonstration Project in Montgomery County, Maryland: Jail and Community Based Substance Abuse Treatment Program Model." University of Maryland, College Park. This study reports the results of an evaluation of a jail-based modified-TC program in Montgomery County Maryland. About 47% of the TC participants in the program also received community aftercare. The comparison group, matched on several variables, did not participate in the programs. Some differences were found on drug history and type of prior offenses (the comparison group had more drug history and a higher percentage of non-traffic offenses). The result reported here is from the multivariate analysis conducted to control for these differences.	3 0 296 232 2.0 At	-0.29 -0.15 .00 S***	- - -
Fabelo, T. (1999). Three year recidivism tracking of offenders participating in substance abuse treatment programs. Texas Criminal Justice Policy Council. This is the result of the first cohort of the IPTC program in Texas (see Eisenberg(96)) vs. a matched comparison group eligible but not selected for the TC.	3 0 672 395 3.0 Rei	0.00 0.00 1.0 0	- - -
Fabelo, T. (1999). Three year recidivism tracking of offenders participating in substance abuse treatment programs. Texas Criminal Justice Policy Council. This is the result of the second cohort of the IPTC program in Texas vs. a matched comparison group eligible but not selected for the TC.	3 0 482 482 3.0 Rei	0.00 0.00 1.0 0	- - -
Knight, K., Simpson, D. D., Hillier, M. L. (1999). "Three-year reincarceration outcomes for in-prison therapeutic community treatment in Texas." <i>The Prison Journal</i> 79(3): 337-351. This study reports the results of the Kyle TC in Texas which has a work-release aftercare model. In-prison TC completers (there were only 39 TC dropouts out of 330) were compared to a matched group of offenders who were selected for the Kyle program but did not attend because they had too short a sentence left to serve or for other reasons of the Parole Board. The groups matched well on many variables but the treatment group contained higher risk offenders. Some of the TC completers then completed an aftercare treatment program and some didn't; the result reported here combines the aftercare completers and dropouts. Also, the result reported here is for the Higher risk offenders of both treatment and comparison groups.	3 0 224 58 3.0 Rc	-0.23 -0.12 .09 S*	- - -
Martin S. S., Butzin, C. A., Saum C. A., Inciardi, J. A. (1999). "Three-year outcomes of therapeutic community treatment for drug-involved offenders in Delaware: From prison to work release to aftercare." <i>The Prison Journal</i> 79(3): 294-320. This study reports the evaluation results of the KEY-CREST TC continuum of care in Delaware, which has a work-release aftercare model. The result for the treatment group reported here is for in-prison TC (KEY) completers who then participated in the community based CREST aftercare work-release based community TC. This group is compared to a matched group of offenders who went into a conventional work-release program following a non-TC prison stay. Some of the CREST group completed the program and some didn't; the results reported here combine the completers and dropouts. The result reported here is from the authors multivariate logistic regression analysis that attempts to control for pre-existing differences.	3 0 68 165 3.0 Atsr	-0.27 -0.14 .06 S*	- - -
Wexler, H. K., Melnick, G., Lowe, L., Peters, J. (1999). "Three-year reincarceration outcomes for adult in-prison therapeutic community and aftercare in California." <i>The Prison Journal</i> 79(3): 321-336. This study reports the results of the Armity TC in California which has a TC aftercare model. Random assignment was used for those participating in the in-prison TC program vs. those not entering the prison-based TC. Some of the prison-based TC completers then completed a post-prison aftercare TC program and some didn't. The results reported here combine the aftercare TC completers and dropouts.	3 0 216 189 3.0 Rei	-0.24 -0.12 .02 S**	- - -

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Design Score	Researcher Role	N (Prog)	N (Comp)	Follow-up (yrs)	Crime Outcome	ES	AdjES	p	Sig	Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)	Mean Number of Offenses (of the proportion that Offend or Re-Offend)	Difference in the proportion of offenders
Notes to Information Listed: The "Design Score" is a measure of the overall level of confidence that can be placed in the findings based on how the evaluation was designed—a "5" is the highest score, "1" is the lowest. "Researcher Role" is whether the program was carried out by the developer (1) or whether it was a "real world" program (0). "N(Prog)" and "N(Comp)" are the numbers in the treatment and comparison groups. "Follow-up (yrs)" is the follow up time in years. "Crime Outcome" is a code for the type of recidivism measure used in the study. "ES" is the mean difference effect size approximated from proportion data (dichotomous group recidivism rates) using the arcsine transformation and adjusted using the Hedges correction for small sample sizes as described in Lipsey & Wilson(2000). "AdjES" is the odds-institute-adjusted effect size; p is the significance level; and "Sig" indicates significance levels (NS=p>.10; S**=p>.05; S***=p>.01; S****=p<.001).													
Prendergast, M. L., Wellisch, J., and Wong, M. M. (1996). "Residential Treatment for Women Parolees Following Prison-Based Drug Treatment: Treatment Experiences, Needs and Services, Outcomes." <i>The Prison Journal</i> 76(3): 253-274. The study reports the results from a TC program at the California Institute for Women for offenders who completed the program and received at least 1 month of community aftercare vs. a matched group of women who did not enter the prison program (they applied for the program but did not enter) or receive aftercare. The result reported here estimates the effect of the program for new offenses leading to reincarceration.	3	0	291	19	22	1.0	Rc	-0.22	-0.11	.49	NS	-	-
Swartz, J. A., Lurigio, A. J., Stomka, S. A. (1996). "The Impact of IMPACT: An assessment of the effectiveness of a jail-based treatment program. Crime and Delinquency, 42(4): 553-573. The study reports the results from a modified TC program Chicago's Cook County Jail. The result reported here is for those who participated in community aftercare following the TC program vs. those TC program participants who did not attend the aftercare. The results are derived from the authors' regression analysis.	3	0	267	267	162	1.5	At	-0.38	-0.19	.00	S****	-	-
Knight, K. and Hillier, M. (1997). "Community-Based Substance Abuse Treatment: A 1-Year Outcome Evaluation of the Dallas County Judicial Treatment Center." <i>Federal Probation</i> 61(2): 61-68.	3	0	171	171	179	3.0	Ct	-	-	-	-	-	-
Field, G. (1985). "The Cornerstone Program: A Client Outcome Study." <i>Federal Probation</i> 49: 50-55. This program (the Cornerstone Program) was located in the Oregon State Hospital. The result here combines program completers with dropouts vs. earlier Oregon parolees with some alcohol or substance abuse history. No information was provided on the comparability of the two groups.	Lt3	0	43	43	166	3.0	Ct	-	-	-	-	-	-
Field, G. (1989). "The Effects of Intensive Treatment on Reducing the Criminal Recidivism of Addicted Offenders." <i>Federal Probation</i> December: 51-56. This program (the Cornerstone Program) was located in the Oregon State Hospital. The result here compares program graduates vs. all program dropouts.	Lt3	0	43	43	166	3.0	Ct	-	-	-	-	-	-
Lipton, Douglas S. (1998). "Treatment for Drug Abusing Offenders During Correctional Supervision: A Nationwide Overview." <i>Journal of Offender Rehabilitation</i> 26: 1-45. This is the Amity program for men at Donovan Prison. The outcome measure is reincarceration, 1-year follow-up.	3	0	217	217	73	0.0	0.00	-	-	-	-	-	-
Hillier, M. L., Knight, K., Devereux, J., Hathcock, M. (1996) "Posttreatment Outcomes for Substance-Abusing Probationers Mandated to Residential Treatment." <i>Journal of Psychactive Drugs</i> 28(3): 291-296.	Lt3	0	351	351	100	0.0	0.00	-	-	-	-	-	-
Non-Prison Therapeutic Community													
Martin S. S., Butzin, C. A., Sautin C. A., Iocardi, J. A. (1999). "Three-year outcomes of therapeutic community treatment for drug-involved offenders in Delaware: From prison to work release to aftercare." <i>The Prison Journal</i> 79(3): 284-320. This study reports the evaluation results of the CREST community-based TC in Delaware (a work-release model). In the study, random assignment was used to establish the CREST group and the control group of offenders who went into a conventional work-release program following prison stay. Neither group participated in a prison-based TC. The result reported here is from the authors' multivariable logistic regression analysis.	5	0	157	157	165	3.0	Atsr	-0.15	-0.15	.18	NS	-	-
Belenko, S. (2000). "Long-term recidivism impact of a residential drug treatment alternative to prison program." Paper presented at the annual meeting of the American Society of Criminology, San Francisco, November 2000. This report presents preliminary outcome data on New York's Drug Treatment Alternative to Prison Program. The results reported here are from the authors logistic regression analysis.	3	0	156	156	29	2.0	At	-0.49	-0.25	.02	S**	-	-
Adult Drug Courts													
Turner, S., Greenwood, P., Fein, T, and Deschenes, E. (1989). "Perceptions of drug court: How offenders view ease of program completion, strengths and weaknesses, and the impact on their lives." <i>National Drug Court Institute Review</i> 2(1). This research reports the 3-year outcomes of the Maricopa County (Arizona) First Time Drug Offender Program, a post-adjudicatory drug court. The program is for first-time felony drug possession offenders, with no more than one non-drug felony related conviction.	5	0	143	363	3.0	At	-0.22	-0.22	.03	S**	-	-	-

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information			Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)			Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)			
	Design Score	N (Prog)	N (Comp)	Researcher Role	Follow-up (yrs)	Crime Outcome	ES	AdjES	p	Sig
Harrill, A., Cavanagh, S., and Roman, J. (1998). Final Report: Findings from the evaluation of the D.C. Superior Court drug intervention program. Washington: The Urban Institute, December. This research reports the results of the "Treatment docket" of the D.C. experiment--for defendants with drug felonies. The result reported here is for the treatment participants vs. the standard docket, with the effect estimated from the authors logistic regression to control for pre-existing differences.	3	0	140	311	1.0	At	-0.36	-0.18	.00	S***
Peters, Roger H. and Mary R. Murnin. (2000). "Effectiveness of Treatment-Based Drug Courts in Reducing Criminal Recidivism." Criminal Justice and Behavior 27: 72-96. This research reports the results of a mixed diversion and post-adjudication drug court program in Escambia county, Florida, for drug and property offenders with a history of drug involvement and limited criminal justice involvement. The result shown here compares program completers and non-completers (combined) vs. a matched comparison group. The authors adjusted for a pre-existing difference (the treatment group had more prior arrests than the comparison group).	3	0	168	81	2.5	At	0.10	0.06	.46	NS
Peters, Roger H. and Mary R. Murnin. (2000). "Effectiveness of Treatment-Based Drug Courts in Reducing Criminal Recidivism." Criminal Justice and Behavior 27: 72-96. This research reports the results of a diversion drug court program in Okaloosa county, Florida, for drug and property offenders with a history of drug involvement and limited criminal justice involvement. The result shown here compares program completers and non-completers (combined) vs. a matched comparison group. The authors adjusted for a pre-existing difference (the treatment group had more prior arrests than the comparison group).	3	0	58	31	2.5	At	-0.23	-0.12	.29	NS
Goldkamp, J. S., White, M. D., and Robinson, J. B. (2000). Do Drug Courts Work?: Getting Inside the Drug Court Black Box. Philadelphia: Crime and Justice Research Institute, paper presented at the American Society for Criminology, November. This research reports the results of the Clark County (Las Vegas) drug court. The results reported are from the authors' logistic regression analysis to control for pre-existing differences, for the 1993 cohort.	3	0	99	109	1.0	At	-0.42	-0.21	.00	S***
Goldkamp, J. S., White, M. D., and Robinson, J. B. (2000). Do Drug Courts Work?: Getting Inside the Drug Court Black Box. Philadelphia: Crime and Justice Research Institute, paper presented at the American Society for Criminology, November. This research reports the results of the Clark County (Las Vegas) drug court. The results reported are from the authors' logistic regression analysis to control for pre-existing differences, for the 1994 cohort.	3	0	100	97	1.0	At	-0.53	-0.26	.00	S***
Goldkamp, J. S., White, M. D., and Robinson, J. B. (2000). Do Drug Courts Work?: Getting Inside the Drug Court Black Box. Philadelphia: Crime and Justice Research Institute, paper presented at the American Society for Criminology, November. This research reports the results of the Clark County (Las Vegas) drug court. The results reported are from the authors' logistic regression analysis to control for pre-existing differences, for the 1995 cohort.	3	0	100	95	1.0	At	-0.47	-0.23	.00	S***
Goldkamp, J. S., White, M. D., and Robinson, J. B. (2000). Do Drug Courts Work?: Getting Inside the Drug Court Black Box. Philadelphia: Crime and Justice Research Institute, paper presented at the American Society for Criminology, November. This research reports the results of the Clark County (Las Vegas) drug court. The results reported are from the authors' logistic regression analysis to control for pre-existing differences, for the 1996 cohort.	3	0	100	98	1.0	At	0.12	0.06	.40	NS
Goldkamp, J. S., White, M. D., and Robinson, J. B. (2000). Do Drug Courts Work?: Getting Inside the Drug Court Black Box. Philadelphia: Crime and Justice Research Institute, paper presented at the American Society for Criminology, November. This research reports the results of the Clark County (Las Vegas) drug court. The results reported are from the authors' logistic regression analysis to control for pre-existing differences, for the 1997 cohort.	3	0	246	201	1.0	At	0.08	0.04	.37	NS
Goldkamp, J. S., White, M. D., and Robinson, J. B. (2000). Do Drug Courts Work?: Getting Inside the Drug Court Black Box. Philadelphia: Crime and Justice Research Institute, paper presented at the Multnomah County (Portland) drug court. The results reported are from the authors logistic regression analysis to control for pre-existing differences, and compare the drug court group vs. the combined results for the comparison A and B groups, for the 1991-92 cohort.	3	0	150	205	1.0	At	-0.26	-0.13	.02	S**
Goldkamp, J. S., White, M. D., and Robinson, J. B. (2000). Do Drug Courts Work?: Getting Inside the Drug Court Black Box. Philadelphia: Crime and Justice Research Institute, paper presented at the Multnomah County (Portland) drug court. The results reported are from the authors logistic regression analysis to control for pre-existing differences, and compare the drug court group vs. the combined results for the comparison A and B groups, for the 1993-94 cohort.	3	0	150	205	1.0	At	-0.26	-0.13	.02	S**

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information			Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)			Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)			
	Design Score	Researcher Role	N (Prog)	N (Comp)	Follow-up (yrs)	Crime Outcome	ES	AdjES	p	Sig
Goldkamp, J. S., White, M. D., and Robinson, J. B. (2000). Do Drug Courts Work? Getting Inside the Drug Court Black Box. Philadelphia: Crime and Justice Research Institute, paper presented at the American Society for Criminology, November. This research reports the results of the Multnomah County (Portland) drug court. The results reported are from the authors' logistic regression analysis to control for pre-existing differences, and compare the drug court group vs. the combined results for the comparison A and B groups, for the 1995-96 cohort.	3	0	152	198	1.0	At	-0.17	-0.09	.11	NS
Goldkamp, J. S., White, M. D., and Robinson, J. B. (2000). Do Drug Courts Work? Getting Inside the Drug Court Black Box. Philadelphia: Crime and Justice Research Institute, paper presented at the American Society for Criminology, November. This research reports the results of the Multnomah County (Portland) drug court. The results reported are from the authors' logistic regression analysis to control for pre-existing differences, and compare the drug court group vs. the combined results for the comparison A and B groups, for the 1997 cohort.	3	0	143	198	1.0	At	0.09	0.05	.39	NS
Gottfredson, Denise C., Coblenz, Kris and Harmon, Michelle A. (1997). "A Short-term Evaluation of Baltimore City Drug Treatment Court Program." Perspectives Winter: 33-38. The diversion drug court is for non-violent offenders (current charge) with drug abuse problems. Summary results also reported in: Belenko, Steven (1998), Research on Drug Courts: a Critical Review, The Center on Addiction and Substance Abuse at Columbia University, June. The findings reported here use the author's logistic regression results to adjust for pre-existing differences (the treatment group was at higher risk for re-offense than the matched comparison group).	3	0	145	529	0.5	At	-0.21	-0.11	.03	S*
Gottfredson, Denise C., Exum, M. L. (2000). "The Baltimore City Drug Treatment Court: One-Year Results from a Randomized Study." Paper presented at the annual meeting of the American Society of Criminology, San Francisco, November. This is a randomized trial of the Baltimore Court (a different test than the matched group 1997 study) with 12 month outcomes; 36 month outcomes will be calculated.	5	0	139	96	1.0	At	-0.25	-0.25	.06	S*
Vito, Gennaro F., Tewksbury, Richard A. (1998). "The Impact of treatment: The Jefferson County (Kentucky) drug court program." Federal Probation 62(2): 46-51. This research reports the results of a diversion drug court program in Kentucky for drug possession offenders with no history of violent offenses. The results shown here compares program completers and non-completers (combined) vs. a matched comparison group. The authors found that the two groups were comparable on most pre-existing factors, but the treatment group may have been at a slightly higher risk to re-offend.	3	0	216	74	1.0	Cf	-0.14	-0.07	.28	NS
Granfield, Robert, Eby, Cynthia, Brewster, Thomas. (1998). "An Examination of the Denver Drug Court: The Impact of a Treatment-Oriented Drug-Offender System." Law & Policy 20(2): 183-202. This research reports the results of the post-adjudication Denver drug court for offenders with a misdemeanor or felony drug charge. The result reported here combines the outcomes of the two pre-program comparison groups. The author found the drug court and comparison groups to be "relatively equivalent" on sex, age, or previous criminal history.	3	0	100	200	1.0	At	0.05	0.03	.68	NS
Burdick, B., and Skolnick, J. H. (1998). "From 'treatment to justice' in Oakland, California." In Terry, W. C. III (ed.) "The early drug courts: case studies in judicial innovation." Thousand Oaks: Sage, Chapter 3, p. 43-76. This research reports the results of Oakland's FIRST diversion drug court for those charged with first-time drug possession for use charges with no felony convictions within the previous five years. The treatment sample includes both completers and non-completers. The comparison sample consisted of offenders prior to the treatment drug court who entered the non-drug court diversion program; limited comparisons indicate similar age and racial makeup. The finding reported here was adjusted by the Institute for differences in at-risk time.	3	0	110	110	4.0	At	-0.19	-0.10	.16	NS
Bell, M. M. (1998). "King County Drug Court Evaluation." Final Report, Seattle, WA. The result reported here is for all who entered the diversion (pre-adjudication) King County drug court for adults charged with possession with no prior sex or violent adult convictions. The result reported here compares drug court participants (completers and non-completers) vs. those who opted out. The groups were similar on some matching variables, but the drug court group was probably at higher risk since they had a more extensive criminal history than the opt-outs.	3	0	154	180	0.5	Ccf	-0.18	-0.09	.11	NS
Evaluation: Spokane County Drug Court Program, 1999. The result reported here is for all who entered the pre-trial diversion Spokane County drug court for arrests for possession or forged fraudulent prescriptions, excluding those with pending felony charges, gang involvement, and prior sex or violent convictions. The result reported here compares drug court participants (completers and non-completers) vs. those who opted out. The groups were similar on some matching variables, but the drug court group was probably at higher risk since they had a more extensive criminal history than the opt-outs.	3	0	73	130	2.5	At	0.13	0.06	.38	NS

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information	Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)	Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)
	Design Score N (Prog) N (Comp) Researcher Role Follow-up (yrs) Crime Outcome	ES AdjES p Sig	ES AdjES p Sig
Goldkamp, J. S., and Welland, D. (1993). Assessing the Impact of Dade County's Felony Drug Court. Final Report. (Philadelphia: Crime and Justice Research Institute.) This research reports the results of Miami's drug court. The finding reported here is for the drug court sample vs. the pre-drug court sample of drug cases (sample V); because there were differences reported in pre-existing differences between the two groups, the author's multivariate logit results were used to estimate the program effect shown here.	.3 0 326 301 1.5 At	-0.12 -0.06 .15 NS	- - -
Miethe, T. D., Lu, H., Reese, E. (2000). Reintegrative shaming and recidivism risks in drug court: Explanations for some unexpected findings. "Crime and Delinquency 46(4): 522-541. This research reports the results of the La Vegas drug court evaluation. The authors used logistic regression models to account for pre-existing differences in the drug court and non-drug court samples.	3 0 301 301 1.0 Circ	0.23 0.12 .00 S***	- - -
Terry, W. C., III (1999). "Brown county's dedicated drug treatment court: From post-adjudication to diversion," in Terry, W. C., III (ed.) "The early drug courts: case studies in judicial innovation," Thousand Oaks: Sage, Chapter 4, p 77-107. This research reports the results of Brown County's drug court. The treatment group are program completers only. The comparison group had significantly more females in it, and any differences in prior criminal history was not reported.	Lt3 0 221 69 1.0 Af	- - -	- - -
Sechrist, D. K., Shichor, D., Anist, K., Briceño, G. (1998). The Riverside County drug court, final research report for the Riverside County Probation Department. This research reports the results of a study of the Riverside County, California drug court. There were known pre-existing differences in the matched comparison group (the pre-program comparison groups had more criminal history). These differences were not controlled in the evaluation. The result reported here for the treatment group combines program graduates and dropouts, and adjusts for the different follow up times used in the evaluation.	Lt3 0 76 243 0.0 0.00	- - -	- - -
Johnson, S., and Laessa, E., J. (2000). The hamilton county drug court: outcome evaluation findings. University of Cincinnati Center for Criminal Justice Research. This research reports the results of an evaluation of the Cincinnati Drug Court. The drug court participants were compared to a matched group that did not receive the drug court program; the result reported here is from the authors logistic regression to control for pre-existing differences.	3 0 223 225 1.3 At	-0.32 -0.16 .00 S***	- - -
Bureau of Justice Assistance. (2000). Oregon: The Multnomah County STOP Drug Diversion Program, in Creating a New Criminal Justice System for the 21st Century: Findings and Results From State and Local Program Evaluations. NCJ 178936:39-48. This research reports the results of the Multnomah County (OR) drug court for offenders with a misdemeanor or felony drug charge. The result reported here for the treatment group combines program completers and dropouts. The comparison group was matched on sex, age, and previous criminal history and no significant differences were found. The difference in proportions was estimated from the effect size for the difference in mean convictions rates.	3 0 300 150 2.0 Ct	-0.30 -0.15 .00 S***	- - -
Breckenridge, J. F., Winfree, J., L., Maupin, J., R., Clason, D. (2000). "Drunk drivers, SWI, 'drug court' treatment, and recidivism: Who fails?" Justice Research and Policy 2(1): 87. This research reports on a drug court in Las Cruces, New Mexico for alcohol DWI offenders.	5 0 39 36 1.6 Ct	-0.18 -0.18 .43 NS	- - -
Belenko, S., Fagan, J. A., Dumanovsky, T. (1994). "The effects of legal sanctions on recidivism in special drug courts." The Justice System Journal, 17(1): 53-81. This research was on New York City's fast track drug court where speed, rather treatment, was the goal.	3 0 2742 3202 1.3 Af	- - -	- - -
Deschenes, E., P., Iman, I., Foster, T., L., Diaz, L., Moreno, V., Patasci, L., and Ward, D. (1999). Evaluation of Orange County Drug Courts, Richmond: The Center for Applied Local Research. This study used a non-equivalent comparison group design and there were significant differences between the drug court group (less risky) and the probation comparison group (more risky). No multivariate analysis is attempted to control for the pre-existing differences was reported.	Lt3 0 236 234 2.0 At	-0.27 0.00 .00 S***	- - -
Adult In-Prison Non-residential Substance Abuse Treatment			
Washington State Department of Corrections, Division of Management and Budget Planning and Research Section, "Substance Abuse Treatment Program Evaluation of Outcomes and Management Report." (April 1998). This research examined Washington's Substance Abuse Treatment Program, comparing program participants with a matched group from the year before the SATP began.	3 0 436 240 2.0 Rc	-0.12 -0.06 .12 NS	- - -

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information			Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)			Difference in the Mean Number of Offenses (of the proportion that Offend or offend)			
	Design Score	N (Prog)	N (Comp)	Researcher Role	Follow-up (yrs)	Crime Outcome	ES	AdjES	p	Sig
Notes to Information Listed: The "Design Score" is a measure of the overall level of confidence that can be placed in the findings based on how the evaluation was designed—a "5" is the highest score, "1" is the lowest. "Researcher Role" is whether the program was carried out by the treatment (1) or whether it was a "real world" program (0). "N(Prog)" and "N(Comp)" are the numbers in the treatment and comparison groups. "Follow-up (yrs)" is the follow up time in years. "Crime Outcome" is a code for the type of recidivism measure used in the study. "ES" is the mean difference effect size approximated from proportion data (dichotomous group recidivism rates) using the arcsine transformation and adjusted using the Hedges correction for small sample sizes as described in Lipsey & Wilson (2000). "AdjES" is the institute-adjusted effect size; p is the significance level; and "Sig" indicates significance levels (NS=p>.10; S**=p>.05; S***=p>.01; S****=p<.001).										
Wexler, H. K., Falkin, G. P., Lipton, D. S., Rosenblum, A. B. (1992). "Outcome Evaluation of a Prison Therapeutic Community for Substance Abuse Treatment," pp. 156-174 in Carl G. Leukefeld and Frank M. Tims (eds.), Drug Abuse Treatment in Prisons and Jails, NIDA Research Monograph 118, Rockville, MD: NIDA. These research reports the results of counseling/drug treatment program in New York. The comparison reported here is for the male program participants vs. the no treatment control group (volunteers for a TC treatment who were put on a waiting list and never entered the program); the two groups matched fairly well.	3	0	261	159	3.4	At	-0.02	-0.01	.83	NS
Wexler, H. K., Falkin, G. P., Lipton, D. S., Rosenblum, A. B. (1992). "Outcome Evaluation of a Prison Therapeutic Community for Substance Abuse Treatment," pp. 156-174 in Carl G. Leukefeld and Frank M. Tims (eds.), Drug Abuse Treatment in Prisons and Jails, NIDA Research Monograph 118, Rockville, MD: NIDA. These research reports the results of counseling/drug treatment program in New York. The comparison reported here is for the female program participants vs. the no treatment control group (volunteers for a TC treatment who were put on a waiting list and never entered the program); the two groups matched fairly well. The Institute adjusted the result of the no treatment group to account for their shorter time at risk.	3	0	113	38	2.9	At	0.05	0.03	.78	NS
Gransky, Laura A. and Jones, Robert J. (1995). Evaluation of the Post-Release Status of Substance Abuse Program Participants. Illinois Criminal Justice Authority Report. This research examined the Dixon Springs Impact Incarceration substance abuse program.	3	0	739	3350	2.0	Ct	-0.20	-0.10	.00	S****
Flinigan, Michael. (1997). "Evaluation of Three Oregon Pre-Release Day Treatment Substance Abuse Programs for Inmates." Prepared for Center for Substance Abuse Treatment. This is the INFOCUS at the Oregon Women's Correctional Center. The results reported here combines completers and non-completers.	3	0	155	56	?	At	-0.59	-0.30	.00	S***
Darabi, G. Abbas (1992). Tier Programs Outcome Evaluation: A Recommitment Study. Florida Department of Corrections. This evaluation compared treated and un-treated inmates; no adjustments were made to control for pre-existing or motivational differences.	1.3	0	0	0.0	0.00	0.00	0.00	0.00	0	-
Adult Community-Based Substance Abuse Treatment										
John, Annette and Stipak, Brian (1992). "Drug Treatment and Electronically Monitored Home Confinement: An Evaluation of a Community-Based Sentencing Option." Crime and Delinquency 38: 158-170. This research is on an intensive outpatient drug program in Clackamas county where offenders are under electronic monitoring. The comparison group in this test is those in a work release facility. Significant differences in pre-existing variables were found; a logistic regression was used to control for these—the result here for all program participants.	3	0	64	96	-	At	0.16	0.08	.31	NS
California Department of Corrections. (1987). Los Angeles Prison Parole Network: An Evaluation Report. State of California. This research reports the results of an evaluation of a California substance abuse treatment program (outpatient and long-term residential, but no case management) provided to parolees living in Los Angeles. The result reported here is from the residential, logistic regression analysis that was used to control for differences between the treatment and matched comparison groups.	3	0	361	1364	1.0	Rei	-0.16	-0.08	.01	S***
Benedict, W. R., Huff-Corzzine, I., Corzine, J. (1998). "Clean up and go straight: effects of drug treatment on recidivism among felony probationers." American Journal of Criminal Justice, 72(2): 169-187. This study used survey data to examine the recidivism rates of male felony property offenders who had varying degrees of success in treatment. The result reported here is from the authors' proportional hazards model for all male offenders.	3	0	183	183	3.0	Af	-0.23	-0.12	.03	S**
Latessa, E. J., and Moon, M. M. (1992). "The Effectiveness of Acupuncture in an Outpatient Drug Treatment Program." Journal of Contemporary Justice, 8(4): 317-331. This research tested whether acupuncture, when added to counseling/therapy, contributed to lower recidivism rates.	5	0	182	45	?	Cf	-	-	-	-
Hepburn, J. R., Johnston, C. W. and Rogers, C. "Do Drugs, Do Time: An Evaluation of the Maricopa County Demand Reduction Program." NIJ research in Brief (Oct.). We did not calculate effect size as the results include program graduates only and no numbers of participants were reported.	1.3	0	0	0.0	0.00	-	-	-	-	-

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information			Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)			Difference in the Mean Number of Offenses (of the proportion that Offend or offend)		
	Design Score	N (Prog)	N (Comp)	Fol-low-up (yrs)	Crime Outcome	ES	AdjES	p	Sig
Vito, G. F. (1989). "The Kentucky Substance Abuse Program: A Private Program to Treat Probationers and Parolees." Federal Probation 65-72. This study focused on substance abuse-outpatient treatment in three Kentucky counties—the outpatient treatment program for probationers and parolees involved in self-help counseling sessions. There were significant pre-existing differences between the treatment and comparison groups; a multivariate analysis was performed but not the results were not reported.	Lt3	0	247	230	0.5	Af	-	-	-
Wagoner, J. L., Piazza, N. J. (1993). "Group therapy for adult substance abusers on probation." Journal of Offender Rehabilitation 19(3/4): 41-56. There were significant pre-existing differences between the treatment and matched group and they were not controlled by multivariate analysis.	Lt3	0	0	0	0.0	0.00	.00	.00	-
Hepburn, J. R., Albionetti, C. A. (1994). "Recidivism among drug offenders: a survival analysis of the effects of offender characteristics, type of offense, and two types of intervention." Journal of Quantitative Criminology 10(2): 159-179. The recidivism outcome measures used in this analysis ("petition to revoke probation" and "probation revocation") were not relevant enough for including in the Institute's cost-benefit analysis.	Lt3	0	0	30	Af	-	-	-	-
Adult Offender Case Management Substance Abuse Programs									
Anglin, M. D., Longshore, D., Turner, S. (1999). "Treatment alternatives to street crime: An evaluation of five programs." Criminal Justice and Behavior 26(2): 168-195. Also reported in: Anglin, M. Douglas, Douglas Longshore, Susan Turner, Duane McBride, James Inciardi, and Michael Prendergast. (1996). Studies of the Functioning and Effectiveness of TASC. Final report. Los Angeles: UCLA Drug Abuse Research Center. This entry reports the Birmingham evaluation site, where the comparison group received substantially fewer resources than the TASC group. The authors' multivariate regression results were used to estimate the effect size for the treatment vs. the control groups.	3	0	258	213	0.5	At	-0.08	-0.04	.37 NS
Anglin, M. D., Longshore, D., Turner, S. (1999). "Treatment alternatives to street crime: An evaluation of five programs." Criminal Justice and Behavior 26(2): 168-195. Also reported in: Anglin, M. Douglas, Douglas Longshore, Susan Turner, Duane McBride, James Inciardi, and Michael Prendergast. (1996). Studies of the Functioning and Effectiveness of TASC. Final report. Los Angeles: UCLA Drug Abuse Research Center. This entry reports the Canton evaluation site where the comparison group received only slightly fewer resources than the TASC group. The authors' multivariate regression results were used to estimate the effect size for the treatment vs. the control groups.	5	0	107	85	0.5	At	0.27	0.27	.07 S*
Anglin, M. D., Longshore, D., Turner, S. (1999). "Treatment alternatives to street crime: An evaluation of five programs." Criminal Justice and Behavior 26(2): 168-195. Also reported in: Anglin, M. Douglas, Douglas Longshore, Susan Turner, Duane McBride, James Inciardi, and Michael Prendergast. (1996). Studies of the Functioning and Effectiveness of TASC. Final report. Los Angeles: UCLA Drug Abuse Research Center. This entry reports the Chicago evaluation site where the comparison group received substantially fewer resources than the TASC group. The authors' multivariate regression results were used to estimate the effect size for the treatment vs. the control groups.	3	0	285	202	0.5	At	-0.09	-0.04	.32 NS
Anglin, M. D., Longshore, D., Turner, S. (1999). "Treatment alternatives to street crime: An evaluation of five programs." Criminal Justice and Behavior 26(2): 168-195. Also reported in: Anglin, M. Douglas, Douglas Longshore, Susan Turner, Duane McBride, James Inciardi, and Michael Prendergast. (1996). Studies of the Functioning and Effectiveness of TASC. Final report. Los Angeles: UCLA Drug Abuse Research Center. This entry reports the Orlando evaluation site where the comparison group received slightly fewer resources than the TASC group. The authors' multivariate regression results were used to estimate the effect size for the treatment vs. the control groups.	3	0	252	219	0.5	At	0.03	0.02	.72 NS
Anglin, M. D., Longshore, D., Turner, S. (1999). "Treatment alternatives to street crime: An evaluation of five programs." Criminal Justice and Behavior 26(2): 168-195. Also reported in: Anglin, M. Douglas, Douglas Longshore, Susan Turner, Duane McBride, James Inciardi, and Michael Prendergast. (1996). Studies of the Functioning and Effectiveness of TASC. Final report. Los Angeles: UCLA Drug Abuse Research Center. This entry reports the Portland evaluation site where the comparison group received slightly fewer resources than the TASC group. The authors' multivariate regression results were used to estimate the effect size for the treatment vs. the control groups.	5	0	212	181	0.5	At	0.47	0.47	.00 S***

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information			Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)			Difference in the Mean Number of Offenses (of the proportion that Offend or offend)		
	Design Score	N (Prog)	N (Comp)	Follow-up (yrs)	Crime Outcome	ES	AdjES	p	Sig
Rossman, S., Sridharan, S., Gouvis, C., Buck, J., Morley, E. (1999). "Impact of the opportunity to succeed program for substance-abusing felons: Comprehensive final report." Washington, DC: The Urban Institute. The report presents results for the randomized trial of the Opportunity to Succeed program at three sites: Tampa, St. Louis and Kansas City. The key components include intensive case management, supervision, and service provision in five service domains—substance abuse treatment, employment services, family support services, housing and health/mental health services. Eligibility includes time served for felony conviction, no current convictions for some violent offenses, substance abuse problem and treatment during incarceration, return to specified target area, 12 months parole or probation supervision. The result reported here is from the authors' regression analyses.	5	0	148	141	1.0	At	-0.15	.20	NS
Hanlon, T. E., Nurco, D. N., Bateman, R. W., O'Grady, K. E. (1999). "The relative effects of three approaches to the parole supervision of narcotic addicts and cocaine abusers." The Prison Journal 79(2): 163-181. This research reports the results of a program in Baltimore for parolees with narcotics abuse. The result shown here compares the randomly assigned participants in the treatment program (counseling, case management, and weekly UAs) vs. the combined control groups that received weekly or irregular UAs along with regular assignment to drug programs.	5	0	270	234	1.0	Ct	-0.19	-.19	.03 ***
Rhodes, W. and Gross, M. (1997). Case Management Reduces Drug Use and Criminality Among Drug-Involved Arrestees: An Experimental Study of an HIV Prevention Intervention. Final report to the National Institute of Justice and the National Institute on Drug Abuse. This study involved an assessment of six months intensive case management for drug-involved arrestees released after booking who volunteered for the program. The result reported here is for the Portland, OR site.	5	0	217	344	0.5	Scr	-0.10	-.10	.23 NS
Rhodes, W. and Gross, M. (1997). "Case Management Reduces Drug Use and Criminality Among Drug-Involved Arrestees: An Experimental Study of an HIV Prevention Intervention. Final report to the National Institute of Justice/National Institute on Drug Abuse. This study involved an assessment of six months intensive case management for drug-involved arrestees released after booking who volunteered for the program. The result reported here is for the Washington, DC site.	5	0	228	443	0.5	At	-0.15	-.15	.08 S*
Owens, S., Klebe, K., Arens, S., Durham, R., Hughes, J., Moor, C., O'Keefe, M., Phillips, J., Samo, J., and Stommler, J. (1997). "The Effectiveness of Colorado's TASC Programs." Journal of Offender Rehabilitation 26: 161-176. This research reports of the results of the TASC case management program in southeastern Colorado. The treatment group was compared to a historic comparison group matched on age, ethnicity, and a risk assessment instrument (no significant differences).	3	0	219	172	2.0	Rei	-0.04	-.02	.71 NS
Owens, S., Klebe, K., Arens, S., Durham, R., Hughes, J., Moor, C., O'Keefe, M., Phillips, J., Samo, J., and Stommler, J. (1997). "The Effectiveness of Colorado's TASC Programs." Journal of Offender Rehabilitation 26: 161-176. This research reports of the results of the TASC case management program in western Colorado. The treatment group was compared to a comparison group matched on age, ethnicity, a risk assessment instrument, and drug and alcohol severity scales (no significant differences).	3	0	38	108	2.0	Rei	-0.43	-.21	.02 S**
Van Steile, K. R., Mauser, E., Moberg, D. P. (1994). "Recidivism to the Criminal Justice system of Substance-Abusing Offenders Diverted into Treatment." Crime and Delinquency 40(2): 175-196. This research reported on the Wisconsin Treatment Alternative Program, based on the TASC case management model. The model includes identification, assessment, client monitoring (including urinalysis), and coordination and provision of treatment services, including individual and group therapy. The research did not have a comparison group; the only result (reported here) is for completers vs. non-completers.	Lt3	0	111	147.63	1.5	Ct	-	-	-
Rossman, S., Sridharan, S., Gouvis, C., Buck, J., Morley, E. (1999). "Impact of the opportunity to succeed program for substance-abusing felons: Comprehensive final report." Washington, DC: The Urban Institute. The report presents results for the randomized trial of the Opportunity to Succeed program at three sites: Tampa, St. Louis and Kansas City. The key components include intensive case management, supervision, and service provision in five service domains—substance abuse treatment, employment services, family support services, housing and health/mental health services. Eligibility includes time served for felony conviction, no current convictions for some violent offenses, substance abuse problem and treatment during incarceration, return to specified target area, 12 months parole or probation supervision. The result reported here is from the authors' regression analyses.	5	0	148	141	1.0	At	-0.15	-.15	.20 NS

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information			Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)			Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)		
	Design Score	N (Prog)	N (Comp)	Follow-up (yrs)	Crime Outcome	ES	AdjES	p	Sig
California Department of Corrections. (1996). Parole Partnership Program: A Parole Outcome Evaluation. State of California. This research reports the results of an evaluation of a California case management and substance abuse treatment program provided by local vendors to parolees living in San Diego County. The result reported here is from the Department's logistic regression analysis that was used to control for differences between the treatment and matched comparison groups.	3	0	357	357	1.0	Rei	-0.16	-0.08	.04 S**
Adult Intensive Surveillance: Surveillance-Oriented Enhancements to Probation/Parole									
Petersilia, J., Turner, S., and Deschenes, E. P. (1992). "Intensive Supervision Programs for Drug Offenders." In Byrne, J. M., Lungio, A. J. and Petersilia, J. (eds.), Smart Sentencing: The Emergency of Intermediate Sanctions. Sage: Newbury Park, 18-37. This is the result for the Seattle randomized experiment. Felony drug or drug-related offenders were randomly assigned to routine community supervision or intensive supervision. The ISP included lower caseloads, urinalysis, law enforcement monitoring checks, counseling/treatment.	5	0	89	84	1.0	Ct	-0.03	-0.03	.86 NS
Petersilia, J., Turner, S., and Deschenes, E. P. (1992). "Intensive Supervision Programs for Drug Offenders." In Byrne, J. M., Lungio, A. J. and Petersilia, J. (eds.), Smart Sentencing: The Emergency of Intermediate Sanctions. Sage: Newbury Park, 18-37. This is the result for the Des Moines randomized experiment. Felony drug or drug-related offenders (probationers and parolees) were randomly assigned to routine supervision or intensive supervision. The ISP included lower caseloads, urinalysis, unannounced visits and collateral contacts, counseling/treatment.	5	0	59	56	1.0	Ct	-0.16	-0.16	.39 NS
Petersilia, J., Turner, S., and Deschenes, E. P. (1992). "Intensive Supervision Programs for Drug Offenders." In Byrne, J. M., Lungio, A. J. and Petersilia, J. (eds.), Smart Sentencing: The Emergency of Intermediate Sanctions. Sage: Newbury Park, 18-37. This is the result for the Santa Fe randomized experiment. Felony drug or drug-related offenders (probationers and parolees) were randomly assigned to routine supervision or intensive supervision. The ISP included lower caseloads, urinalysis, collateral contacts, group counseling/treatment.	5	0	29	29	1.0	Ct	0.09	0.09	.72 NS
Petersilia, J., Turner, S., and Deschenes, E. P. (1992). "Intensive Supervision Programs for Drug Offenders." In Byrne, J. M., Lungio, A. J. and Petersilia, J. (eds.), Smart Sentencing: The Emergency of Intermediate Sanctions. Sage: Newbury Park, 18-37. This is the result for the Atlanta randomized experiment. Felony drug or drug-related offenders (probationers and prison-diverted offenders) were randomly assigned to routine supervision or intensive supervision. The ISP included lower caseloads, urinalysis, electronic monitoring, counseling/treatment.	5	0	26	24	1.0	Ct	0.55	0.55	.17 NS
Petersilia, J., Turner, S., and Deschenes, E. P. (1992). "Intensive Supervision Programs for Drug Offenders." In Byrne, J. M., Lungio, A. J. and Petersilia, J. (eds.), Smart Sentencing: The Emergency of Intermediate Sanctions. Sage: Newbury Park, 18-37. This is the result for the Macon County randomized experiment. Felony drug or drug-related offenders (probationers and prison-diverted offenders) were randomly assigned to routine supervision or intensive supervision. The ISP included lower caseloads, urinalysis, electronic monitoring, counseling/treatment.	5	0	26	24	1.0	Ct	-0.14	-0.14	.62 NS
Petersilia, J., Turner, S., and Deschenes, E. P. (1992). "Intensive Supervision Programs for Drug Offenders." In Byrne, J. M., Lungio, A. J. and Petersilia, J. (eds.), Smart Sentencing: The Emergency of Intermediate Sanctions. Sage: Newbury Park, 18-37. This is the result for the Waycross GA randomized experiment. Felony drug or drug-related offenders (probationers and prison-diverted offenders) were randomly assigned to routine supervision or intensive supervision. The ISP included lower caseloads, urinalysis, home curfews, counseling/treatment.	5	0	24	26	1.0	Ct	0.00	0.00	1.0 NS
Petersilia, J., Turner, S., and Deschenes, E. P. (1992). "Intensive Supervision Programs for Drug Offenders." In Byrne, J. M., Lungio, A. J. and Petersilia, J. (eds.), Smart Sentencing: The Emergency of Intermediate Sanctions. Sage: Newbury Park, 18-37. This is the result for the Winchester VA randomized experiment. Felony drug or drug-related offenders (high risk probationers parolees) were randomly assigned to routine supervision or intensive supervision. The ISP included lower caseloads, urinalysis, evening curfews, counseling/treatment.	5	0	28	25	1.0	Ct	0.26	0.26	.36 NS
Petersilia, J., Turner, S., and Deschenes, E. P. (1992). "Intensive Supervision Programs for Drug Offenders." In Byrne, J. M., Lungio, A. J. and Petersilia, J. (eds.), Smart Sentencing: The Emergency of Intermediate Sanctions. Sage: Newbury Park, 18-37. This is the result for the Contra Costa randomized experiment. Felony and misdemeanor drug-related offenders (probationers) were randomly assigned to routine supervision or intensive supervision. The ISP included lower caseloads, urinalysis, counseling/treatment.	5	0	85	85	1.0	Ct	0.00	0.00	1.0 NS

Notes to Information Listed: The "Design Score" is a measure of the overall level of confidence that can be placed in the findings based on how the evaluation was designed—a "5" is the highest score, "1" is the lowest. "Researcher Role" is whether the program was carried out by the researcher (1) or whether it was a "real world" program (0). "N(Prog)" and "N(Comp)" are the numbers in the treatment and comparison groups. "Follow-up (yrs)" is the follow up time in years. "Crime Outcome" is a code for the type of recidivism measure used in the study. "ES" is the mean difference effect size approximated from proportion data (dichotomous group recidivism rates) using the arcsine transformation and adjusted using the Hedges correction for small sample sizes as described in Lipsey & Wilson (2000). "AdjES" is the institute-adjusted effect size, p is the significance level, and "Sig" indicates significance levels (NS=p>.10; S**=p>.05; S***=p<.01).

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Notes to Information Listed: The "Design Score" is a measure of the overall level of confidence that can be placed in the findings based on how the evaluation was designed—a "5" is the highest score, "1" is the lowest. "Researcher Role" is whether the program was carried out by the treatment (1) or whether it was a "real world" program (0). "NProg" and "NComp" are the numbers in the treatment and comparison groups. "Follow-up (yrs)" is the follow up time in years. "Crime Outcome" is a code for the type of recidivism measure used in the study. "ES" is the mean difference effect size approximated from proportion data (dichotomous group recidivism rates) using the arcsine transformation and adjusted using the Hedges correction for small sample sizes as described in Lipsey & Wilson (2000). "AdjES" is the institute-adjusted effect size; p is the significance level; and "Sig" indicates significance levels (NS=p>.10; S*=p>.05; S**=p>.01; S***=p<.001).	Research Design Information		Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)		Mean Number of Offenses (of the proportion that Offend or Re-Offend)	
	Design Score N (Prog) N (Comp)	Follow-up (yrs) N (Outcme)	ES	AdjES	p	Sig	
Petersilia, Joan and Turner, Susan. (1990). Intensive Supervision for High-risk Probationers: Findings from Three California Experiments. Santa Monica, CA: RAND. This is the result for the Los Angeles randomized experiment. High-risk felony drug-related offenders (probationers) were randomly assigned to routine supervision or intensive supervision. The ISP included lower caseloads.	5 0 52	51 1.0 Ct	0.27	0.27	.18	NS	
Petersilia, Joan and Turner, Susan. (1990). Intensive Supervision for High-risk Probationers: Findings from Three California Experiments. Santa Monica, CA: RAND. This is the result for the Los Angeles randomized experiment. High-risk felony drug-related offenders (probationers) were randomly assigned to routine supervision or intensive supervision. The ISP included lower caseloads, and 24-hour electronic monitoring.	5 0 49	51 1.0 Ct	0.24	0.24	.22	NS	
Petersilia, Joan and Turner, Susan. (1990). Intensive Supervision for High-risk Probationers: Findings from Three California Experiments. Santa Monica, CA: RAND. This is the result for the Ventura randomized experiment. High-risk felony drug-related offenders (probationers) were randomly assigned to routine supervision or intensive supervision. The ISP included lower caseloads, urinalysis, counseling/treatment.	5 0 80	86 1.0 Ct	-0.40	-0.40	.01	S**	
Deschenes, E. P., Turner, S., and Petersilia, J. (1995). "A Dual Experiment in Intensive Community Supervision: Minnesota's Prison Diversion and Enhanced Supervised Release Programs." <i>Prison Journal</i> 75(3): 330-357. The program is for parolees (ISP) vs. regular parole. The ISP included lower caseloads, urinalysis, counseling/treatment.	5 0 81	95 1.0 Ct	0.01	0.01	.97	NS	
Turner, S., Petersilia, J. (1992). "Focusing on high-risk parolees: experiment to reduce commitments to the Texas Department of Corrections." <i>Journal of Research on Crime and Delinquency</i> 29(1): 34-61. This is the result for the Dallas randomized experiment. High-risk offenders (parolees) were randomly assigned to routine supervision or intensive supervision. The ISP included lower caseloads, and urinalysis.	5 0 130	91 1.0 Ct	0.10	0.10	.47	NS	
Turner, S., Petersilia, J. (1992). "Focusing on high-risk parolees: experiment to reduce commitments to the Texas Department of Corrections." <i>Journal of Research on Crime and Delinquency</i> 29(1): 34-61. This is the result for the Houston randomized experiment. High-risk offenders (parolees) were randomly assigned to routine supervision or intensive supervision. The ISP included lower caseloads, urinalysis, counseling/treatment.	5 0 239	219 1.0 Ct	-0.08	-0.08	.41	NS	
Erwin, B. S., Bennett, L. A. (1987). "New dimensions in probation: Georgia's experience with intensive probation supervision." <i>Research Brief</i> , National Institute of Justice, January. This is the result for the Georgia intensive supervision program, which was in part a diversion from prison and also an enhancement to probation. The result reported here is the overall recidivism rates adjusted (by the Institute) for the four reported risk categories, and for the authors' finding that 59.4 percent of the ISP cases were more similar to those incarcerated than those place on probation.	3 0 200	297 1.5 Ct	-0.26	-0.13	.00	S***	
Pearson, F.S. (1988). "Evaluation of New Jersey's Intensive Supervision Program." <i>Crime and Delinquency</i> 34(4): 437-448. The New Jersey program is for offenders diverted from prison. The result shown here is for ISP group vs. the "Close OTI" comparison group which was chosen to closely match the treatment group in terms of prior criminal records and sociodemographic background factors." The ISP included lower caseloads, urinalysis, plus a minimum of a 60-day shock incarceration.	3 0 208	85 2.0 Ct	-0.29	-0.14	.02	S**	
Byrne, J. M. and Kelly, L. (1989). "Executive Summary: Restructuring Probation as an Intermediate Sanction: An Evaluation of the Massachusetts Intensive Probation Supervision Program." Final Report to the National Institute of Justice, Research Program on the Punishment and Control of Offenders, Washington, D.C.: National Institute of Justice. This research reports the results of a program for higher risk probationers in Massachusetts. The ISP participants were compared to a sample of ISP-eligible offenders the year before. Some differences were found between the samples, and controlled in multivariate analyses. The result reported here is for the unadjusted figures (the authors noted that the adjusted figures were almost identical.)	3 0 221	196 1.0 Cf	-0.13	-0.06	.20	NS	
Bonta, James, Wallace-Capretta, Suzanne, and Jennifer Rooney. (2000). "A Quasi-Evaluation of an Intensive Rehabilitation Supervision Program." <i>Criminal Justice and Behavior</i> 27(3): 312-329. This report measures programs in Newfoundland, Canada. The result reported here compares intensively supervised probationers and some parolees (who spent very little time in prison and who were electronically monitored in the community) vs. a group of prison parolees from other regions. The ISP group also received a cognitive-behavioral treatment program (Learning Resources Program). The groups were matched on various factors including the LS-R.	3 0 71	100 1.0 Ct	0.03	0.01	.85	NS	

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects

Notes to Information Listed: The "Design Score" is a measure of the overall level of confidence that can be placed in the findings based on how the evaluation was designed—a "5" is the highest score, "1" is the lowest. "Researcher Role" is whether the program was carried out by the developer (1) or whether it was a "real world" program (0). "N(Prog)" and "N(Comp)" are the numbers in the treatment and comparison groups. "Follow-up (yrs)" is the follow up time in years. "Crime Outcome" is a code for the type of recidivism measure used in the study. "ES" is the mean difference effect size approximated from proportion data (dichotomous group recidivism rates) using the arcsine transformation and adjusted using the Hedges correction for small sample sizes as described in Lipsey & Wilson(2000). "AdjES" is the institute-adjusted effect size, p is the significance level, and "Sig" indicates significance levels (NS=p>.10; S=p<.05; S**=p<.01; S***=p<.001).	Research Design Information		Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)		Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)	
	Design Score Researcher Role N (Prog) N (Comp)	Crime Outcome Follow-up (yrs) N (Comp)	ES	AdjES	p	Sig
Lichtman, Cary M. and Sue M. Smock. (1981.) "The Effects of Social Services on Probationer Recidivism: A Field Experiment." <i>Journal of Research in Crime and Delinquency</i> January, 81-100. This research reports the results of an intensive supervision program for newly sentenced felony property offenders in Detroit. Random assignment was used for the intensive and regular probation groups; no significant differences in pre-existing variables were observed.	5 0	233 197	.25	Ct	.03	.03 .75 NS .02
Iowa Department of Corrections. (1988). "Evaluation of Iowa's Intensive Supervision Program: Final Report." Des Moines, Iowa: Department of Corrections. The treatment and matched control groups in this study had significant and uncontrolled differences in pre-existing variables.	Lt3 0	420 205	? ?	- -	- -	- -
Wisconsin Department of Health and Social Services, Office of Policy and Budget. (1989). Reducing Criminal Risk: An Evaluation of the High Risk Offender Intensive Supervision Project. Madison, Wisconsin. The treatment and matched control groups in this study had significant and uncontrolled differences in pre-existing variables.	Lt3 0	64 56	1.0 Rc	- -	- -	- -
Adult Intensive Supervision: Treatment-Oriented Enhancement to Probation/Parole						
Paparozzi, M. A. (1994). A comparison of the effectiveness of an intensive parole supervision program with traditional parole supervision. Unpublished doctoral dissertation, Rutgers, The State University of New Jersey. This research reports on an intensive supervision program in New Jersey that focuses on supervision and treatment or high risk parolees. The research used a matched sample design (ten factors including time of commitment and release, geographic origin of commitment, age, education, race, gender, risk assessment—Wisconsin-type instrument—category). The groups matched fairly well although the treatment groups was at slightly higher risk on four of the ten matching factors. The result reported here is from the authors' logistic regression results to adjust for pre-existing differences.	3 0	240 240	1.0 At	- .28	- .14	.00 S***
Fulton, B., Stichman, A., Latessa, E., Lawrence, T. (1998). "Evaluating the prototypical ISP: Hartford intensive supervision unit Connecticut office of adult probation administrative office of the courts. Final Report. Division of Criminal Justice, University of Cincinnati. This is the result for the Hartford randomized experiment. High-risk offenders (probationers) were randomly assigned to routine supervision or intensive supervision with lower caseloads, urinalysis, and counseling/treatment. Both groups received treatment, but the authors note that the "intensity of services was significantly higher for the ISP group."	5 0	109 94	.8 At	- .08	- .08	.57 NS
Fulton, B., Stichman, A., Latessa, E., Lawrence, T. (1998). "Evaluating the prototypical ISP: Iowa correctional services second judicial district." Final Report. Division of Criminal Justice, University of Cincinnati. This is the result for the Iowa randomized experiment. High-risk offenders (probationers) were randomly assigned to routine supervision or intensive supervision with lower caseloads, urinalysis, and counseling/treatment. Both groups received treatment, but the authors note that the ISP and control groups received a similar level of service but the ISP group received more specialized services.	5 0	101 97	.8 At	- .07	- .07	.63 NS
Petersilia, Joan and Turner, Susan. (1980). Intensive Supervision for High-risk Probationers: Findings from Three California Experiments. Santa Monica, CA: RAND. This is the result for the Contra Costa randomized experiment, but the results reported here are from RAND's non-randomized examination of the effect of program participation on recidivism—the authors' logistic regression results are used for the effects shown here. The ISP included lower caseloads, urinalysis, counseling/treatment.	3 0	85 85	1.0 At	- .23	- .11	.13 NS
Petersilia, Joan and Turner, Susan. (1990). Intensive Supervision for High-risk Probationers: Findings from Three California Experiments. Santa Monica, CA: RAND. This is the result for the Los Angeles randomized experiment, but the results reported here are from RAND's non-randomized examination of the effect of program participation on recidivism—the authors' logistic regression results are used for the effects shown here. The ISP included lower caseloads, urinalysis, counseling/treatment.	3 0	52 51	1.0 At	- .22	- .11	.26 NS
Adult Intensive Supervision: Surveillance-Oriented Diversion from Prison						
Deschenes, E. P., Turner, S., and Petersilia, J. (1995). "A Dual Experiment in Intensive Community Supervision: Minnesota's Prison Diversion and Enhanced Supervised Release Programs." <i>Prison Journal</i> 75(3): 330-357. The program is for offenders diverted from prison (ICS) vs. prison. The ISP included lower caseloads, urinalysis, counseling/treatment.	5 0	76 48	2.0 Ct	- .14	- .14	.45 NS

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information	Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)	Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)
Notes to Information Listed: The "Design Score" is a measure of the overall level of confidence that can be placed in the findings based on how the evaluation was designed—a "5" is the highest score, "1" is the lowest. "Researcher Role" is whether the program was carried out by the treatment (1) or whether it was a "real world" program (0). "N(Prog)" and "N(Comp)" are the numbers in the treatment and comparison groups. "Follow-up (yrs)" is the follow up time in years. "Crime Outcome" is a code for the type of recidivism measure used in the study. "ES" is the mean difference effect size approximated from proportion data (dichotomous group recidivism rates) using the arcsine transformation and adjusted using the Hedges correction for small sample sizes as described in Lipsey & Wilson (2000). "AdjES" is the institute-adjusted effect size; p is the significance level; and "Sig" indicates significance levels (NS=p>.10; S**=p<.05; S***=p<.01).	Design Score N (Prog) Researcher Role N (Comp)	ES AdjES p Sig	ES AdjES p Sig
Petersilia, Joan and Turner, Susan. (1990). Diverting Prisoners to Intensive Probation. Results of an Experiment in Oregon. Santa Monica, CA: RAND. This is the result for the Marion County Oregon randomized experiment.	5 0 12 12 1.0 At	-0.33 -0.33 .41 NS	- - -
Smith, Linda G. and Akers, Ronald L. (1993). "A Comparison of Recidivism of Florida's Community Control and Prison: A Five-Year Survival Analysis." <i>Journal of Research in Crime and Delinquency</i> 30(3): 267-292. The research report on the Florida Community Control Program for offenders diverted from prison, using primarily home confinement. The comparison groups was matched to the treatment group; the comparison group was a slightly higher risk to re-offend. The result reported here is the authors' logistic regression equation used to adjust for the differences.	3 0 218 265 4.5 At	0.09 0.04 .34 NS	- - -
Marchiniak, L. M. (2000). "The addition of day reporting to intensive supervision probation: a comparison of recidivism rates." <i>Federal Probation</i> 64(1): 34-39. This research examined the effect of adding day reporting to intensive probation supervision in North Carolina. The day reporting group was compared to those given ISP only; a logistic regression was used to control for differences, but criminal history was not included in the regression.	L13 0 151 875 - At	0.06 0.00 .50 NS	0.00 0.00 .00 0
Electronic Monitoring			
Bonta, James, Wallace-Capretta, Suzanne, and Jennifer Rooney. 2000. "A Quasi-Evaluation of an Intensive Rehabilitation Supervision Program." <i>Criminal Justice and Behavior</i> 27(3): 312-329. This report measures programs in Newfoundland, Canada. The result reported here compares intensively supervised parolees who spent very little time in prison and who were electronically monitored in the community, vs. a matched group of probationers. Both groups received a cognitive-behavioral treatment program (Learning Resources Program). The groups were matched on various factors including the LS1-R.	3 0 54 17 1 year Ct	-0.08 -0.04 .77 NS	0.00 0.00 .00 0
Adult Cognitive-Behavioral Sex Offender Treatment with (or without) Relapse Prevention			
Marques, Janice K. (1999). "How to answer the question 'does sex offender treatment work?'" <i>Journal of Interpersonal Violence</i> 14(4): 437-451. This study reports the results of California's Sex Offender Treatment and Evaluation Project, an in-prison cognitive-behavioral treatment program, including relapse prevention. The results reported here combine completers and dropouts for the treatment group and use the volunteer group as the control group. Despite randomization, there were pre-existing differences in the number of mentally disordered sex offenders in the treatment and control groups. Therefore, we adjusted the experimental group's sex offense recidivism rate with a logistic regression adjusting for prior commitments as a mentally disordered sex offender.	5 0 171 182 4.1 As	-0.03 -0.03 .79 NS	- - -
Marques, Janice K. (1999). "How to answer the question 'does sex offender treatment work?'" <i>Journal of Interpersonal Violence</i> 14(4): 437-451. This study reports the results of California's Sex Offender Treatment and Evaluation Project, an in-prison cognitive-behavioral treatment program, including relapse prevention. The results reported here combine completers and dropouts for the treatment group and use the volunteer group as the control group.	5 0 172 184 4.1 At	-0.04 -0.04 .69 NS	- - -
Robinson, D. (1996). "The Impact of Cognitive Skills Training on Post-Release Recidivism Among Canadian Federal Offenders." <i>Research Report No. R-41, Correctional Research and Development, Correctional Service Canada</i> . This Canadian in-prison program uses cognitive skills training. The results reported here are for the sex offenders included in the research sample. The treatment group includes program completers and dropouts combined. This random-assignment study only had a one-year follow up period.	4 0 189 46 1.0 Rc	-0.27 -0.20 .07 S*	- - -
Looman, Jan, Abracen, Jeffrey, and Nicholaschuk, Terry P. (2000). "Recidivism Among Treated Sexual Offenders and Matched Controls: Data from the Regional Treatment Centre (Ontario)." <i>Journal of Interpersonal Violence</i> 15(3): 279-290. This study reports the results of a subset of offenders treated at the Regional Treatment Centre in Canada, an in-prison cognitive behavioral programs. The program was, for the period of evaluation, described as "primarily behavioral in orientation." Relapse prevention was added late in the evaluation period. A majority of the offenders were rapists.	3 0 89 89 10.3 Cs	-0.59 -0.29 .00 S***	- - -
Looman, Jan, Abracen, Jeffrey, and Nicholaschuk, Terry P. (2000). "Recidivism Among Treated Sexual Offenders and Matched Controls: Data from the Regional Treatment Centre (Ontario)." <i>Journal of Interpersonal Violence</i> 15(3): 279-290. This study reports the results of a subset of offenders treated at the Regional Treatment Centre in Canada, an in-prison cognitive behavioral programs. The program was, for the period of evaluation, described as "primarily behavioral in orientation." Relapse prevention was added late in the evaluation period. A majority of the offenders were rapists.	3 0 89 89 10.3 Cns	-0.27 -0.13 .08 S*	- - -

Table IV–K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information	Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)	Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)
	Design Score N (Prog) Researcher Role Follow-up (yrs) Crime Outcome	ES AdjES p Sig	ES AdjES p Sig
Notes to Information Listed: The "Design Score" is a measure of the overall level of confidence that can be placed in the findings based on how the evaluation was designed—a "5" is the highest score, "1" is the lowest. "Researcher Role" is whether the program was carried out by the treatment (1) or whether it was a "real world" program (0). "N(Prog)" and "N(Comp)" are the numbers in the treatment and comparison groups. "Follow-up (yrs)" is the follow up time in years. "Crime Outcome" is a code for the type of recidivism measure used in the study. "ES" is the mean difference effect size approximated from proportion data (dichotomous group recidivism rates) using the arcsine transformation and adjusted using the Hedges correction for small sample sizes as described in Lipsey & Wilson(2000). "AdjES" is the Institute-adjusted effect size; p is the significance level; and "Sig" indicates significance levels (NS=p>.10; S**=p<.05; S***=p<.01).			
McGrath, Robert J., Hoke, Stephen E., and Vojtisek, John E. (1998). "Cognitive-Behavioral Treatment of Sex Offenders: A Treatment Comparison and Long-Term Follow-Up Study." <i>Criminal Justice and Behavior</i> 25: 203-225. This program evaluated was community-based. The comparison here is for specialized (cognitive-behavioral with relapse prevention) vs. non-specialized treatment groups. These two groups had similar pre-existing differences, except that the specialized group had significantly higher incest offenders who tend to re-offend at lower rates. Accordingly, we have adjusted downward the results we report here for the comparison group to reflect the analysis the authors performed on this factor.	3 0 71 32 5.4 As	-0.51 -0.26 .01 S**	-
McGrath, Robert J., Hoke, Stephen E., and Vojtisek, John E. (1998). "Cognitive-Behavioral Treatment of Sex Offenders: A Treatment Comparison and Long-Term Follow-Up Study." <i>Criminal Justice and Behavior</i> 25: 203-225. This program evaluated was community-based. The comparison reported here is for specialized (cognitive-behavioral with relapse prevention) vs. non-specialized treatment groups. These two groups had similar pre-existing differences, except that the specialized group had significantly higher incest offenders who tend to re-offend at lower rates. Accordingly, we have adjusted downward the results we report here for the comparison group to reflect the analysis the authors performed on this factor.	3 0 71 32 5.4 At	-0.52 -0.26 .01 S**	-
Nicholaichuk, T., Gordon, A., Gu, D., and Wong, S. (2000). "Outcome of an institutional sexual offender treatment program: A comparison between treated and matched untreated offenders." <i>Sexual Abuse: A Journal of Research and Treatment</i> 12(2): 139-153. This is a study that reports the results of a Canadian prison-based cognitive behavioral treatment program with relapse prevention for high risk offenders. Recidivism rates are compared for treated volunteers with a matched sample of untreated sex offenders from the same region. The Institute adjusted the findings from this evaluation to account for: a) treatment non-completers, and b) the difference in mean follow up periods between the treatment and matched comparison groups.	3 0 296 283 5.9 Cs	-0.33 -0.16 .00 S***	-
Nicholaichuk, T., Gordon, A., Gu, D., and Wong, S. (2000). "Outcome of an institutional sexual offender treatment program: A comparison between treated and matched untreated offenders." <i>Sexual Abuse: A Journal of Research and Treatment</i> 12(2): 139-153. This is a study that reports the results of a Canadian prison-based cognitive behavioral treatment program with relapse prevention for high risk offenders. Recidivism rates are compared for treated volunteers with a matched sample of untreated sex offenders from the same region. The Institute adjusted the findings from this evaluation to account for: a) treatment non-completers, and b) the difference in mean follow up periods between the treatment and matched comparison groups.	3 0 296 283 5.9 Ct	-0.15 -0.08 .07 S*	-
Song, L., and Lieb, R. (1995). <i>Washington State Sex Offenders: Overview of Recidivism Studies</i> . Olympia: Washington State Institute for Public Policy. This research tested the effect of a prison-based sex offender program (which included, in the mid 1980s, a variety of approaches). The Institute adjusted the findings from this evaluation to account for treatment dropouts.	3 0 119 159 3.0 As	-0.01 -0.01 .93 NS	-
Song, L., and Lieb, R. (1995). <i>Washington State Sex Offenders: Overview of Recidivism Studies</i> . Olympia: Washington State Institute for Public Policy. This research tested the effect of a prison-based sex offender program (which included, in the mid 1980s, a variety of approaches). The Institute adjusted the findings from this evaluation to account for treatment dropouts.	3 0 119 159 3.0 Af	-0.08 -0.04 .53 NS	-
Procter, Edward. (1996). "A five-year outcome evaluation of a community-based treatment programme for convicted sexual offenders run by the probation service." (England) <i>The Journal of Sexual Aggression</i> 2(1): 3-16. This study reports the results from a community-based cognitive behavioral program run by Probation services in Oxfordshire, England between 1989-92. Treated offenders are compared with a well-matched post test comparison group. A majority of the offenders were child molesters.	3 0 51 43 3.0 Cs	-0.22 -0.11 .29 NS	-
Allam, J. (1999). <i>Sex Offender Re-Conviction—Treated vs Untreated Offenders</i> . West Midlands Probation Service Sex Offender Treatment Programme. The study reports the results from a community-based cognitive-behavioral group therapy program. The matched group members were offenders recommended for the program by program staff, but who were given alternative sentences. Statistical information on pre-existing differences was provided for child molester subpopulation; there were either no significant differences or, on some measures, the treatment group was a slightly higher risk of re-offense. The result shown here are for child molesters.	3 0 124 47 2.3 Cs	-0.30 -0.15 .05 S*	-

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Studies Reviewed for Criminal Outcome Effects	Research Design Information			Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)			Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)		
	Design Score	N (Prog)	N (Comp)	Follow-up (yrs)	Crime Outcome	ES	AdjES	p	Sig
Allam, J. (1999). Sex Offender Re-Conviction—Treated vs Untreated Offenders. West Midlands Probation Service Sex Offender Treatment Programme. The study reports the results from a community-based cognitive-behavioral group therapy program. The matched group members were offenders recommended for the program by program staff, but who were given alternative sentences. Statistical information on pre-existing differences was provided for child molester subpopulation; there were either no significant differences or, on some measures, the treatment group was a slightly higher risk of re-offense. The result shown here are for child molesters.	3	0	124	47	2.3	Ct	-0.62	-0.31	.00 S***
Bakker, Leon, Stephen Hudson, David Wales and Riley, David. (1999). "...And there was Light": An Evaluation of the Kia Marama Treatment Programme for New Zealand Sex Offenders Against Children." Unpublished report. This study reports the results on in-prison 31 week treatment program for child molesters in New Zealand. The comparison is between those who completed treatment between 1989 and 1992 and a matched group from 1983 to 1987, prior to the program. The results reported here are the author's adjusted survival rates, adjusted by the Institute to estimate the effect of program dropouts.	3	0	238	283	9.6	Cs	-0.32	-0.16	.00 S***
Studer, Reddon, Roper, and Estrada. (1986). "Phoenix: an in-hospital treatment program for sex offenders." <i>Journal of Offender Rehabilitation</i> 23(1/2): 91-97. The study reports the results of the Phoenix program at Alberta Hospital. This program is a voluntary in-patient treatment program for convicted offenders which combines intensive group therapy, interpersonal skills training, relapse prevention and traditional psychotherapy. The results presented here are for program completers and dropouts between 1987-1992.	Lt3	0	120	100	3.2	As	-	-	-
Clelland, Studer, and Reddon. (1998). "Follow up of rapists treated in a forensic psychiatric hospital." <i>Violence and Victims</i> 13(1): 73-86. The study reports the results only in the Phoenix Program using the same data from Studer et al. (1996) but with a slightly longer follow-up. The research design was program completers vs. dropouts; the program is group psychotherapy with cognitive behavioral components.	Lt3	0	36	38	4.3	As	-	-	-
Quinsey, Vernon L., Khanna, Arunima, and Malcom, P. Bruce. (1998). "A Retrospective Evaluation of the Regional Treatment Centre Sex Offender Treatment Program." <i>Journal of Interpersonal Violence</i> 13(5): 621-644. Despite an extensive multivariate analysis, this retrospective evaluation did not have a no-treatment comparison group (where subjects should have received treatment but didn't). Therefore, valid comparisons cannot be made.	Lt3	0	481	481	3.7	As	-	-	-
Dwyer, S. Margretta. (1997). "Treatment Outcome Study: Seventeen Years after Sexual Offender Treatment." <i>Sexual Abuse: A Journal of Research and Treatment</i> 9(2): 149-160. This study reports the results of an out-patient voluntary treatment program for non-violent offenders in Minneapolis. It compares the reoffenses of those who completed the treatment program with those who almost completed the program (in program for 2+ years).	Lt3	0	125	55	17.0	As	-	-	-
Hildebrand, D. D. and Pithers, W. D. (1992). "Relapse Prevention: Application and Outcome in The Sexual Abuse of Children." <i>Clinical Issues</i> 2: O'Donohue, W., and Geer, J. H., eds. Hillsdale: Lawrence Erlbaum Associates, Ch. 12, 365-393. This research compared program completers to dropouts in Vermont's Treatment Program for Sexual Aggressors.	Lt3	0	50	40	? At	-	-	-	-
Marshall, W. L., and Barbaree, H. E. (1988). "The Long-Term Evaluation of a Behavioral Treatment Program for Child Molesters." <i>Behaviour Research and Therapy</i> 26: 499-511. This study reports the results from a community-based treatment program. Recidivism rates were compared for 2 groups of pedophiles: admitters, who expressed desire for treatment and those who admitted and dropped out either because of distance or because they changed their mind.	Lt3	0	68	58	3.6	UrS	-	-	-
Marshall, W. L., Eccles, A., and Barbaree, H. E. (1991). "The Treatment of Exhibitionists: A Focus on Sexual Deviance versus Cognitive and Relationship Features." <i>Behav. Res. Ther.</i> 29(2): 129-135. This study reports the results of a comparison of 2 treatment programs; one focused on modifying sexual preferences and the other on changing cognitions, improving pro-social behavior and increasing awareness of relapse prevention issues. The results reported here are for the second program focusing on cognition and relapse prevention. The same control group was used in both programs. Both the treatment group and control group admitted they had a problem and expressed a desire for treatment, but those used in the control group lived too far away to participate.	Lt3	0	17	21	3.9	Cs	-	-	-

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	Design Score N (Prog) N (Comp) Researcher Role Follow-up (yrs) Crime Outcome	ES AdjES p Sig	ES AdjES p Sig
Perkins, D. (1987). A psychological treatment programme for sexual offenders. In B. J. McGurk, Thornton, D. M., and Williams, M. (eds.), <i>Applying Psychology to Theory and Practice</i> . Her Majesty's Stationery Office, London. This study reports the results of an in-prison treatment program in England. Results were divided into several categories based on whether or not offenders completed treatment, dropped out, or were removed from the program as well as a fourth group referred to the program but who did not wish to receive treatment (though some did receive). Information was not provided on how well the control group matched the treatment groups in the study. The results reported here for the treatment group combine completers, "continuing," and dropouts.	Lt3 0 62 12 0.0 Ct	- - - -	- - - -
Pierson, Timothy A. (1989). MOSOF: Missouri Sexual Offender Program: Inmate Characteristics and Recidivism Analysis: 1989 Update. This study reports the results from a prison-based treatment program which used an intensive and confrontative group therapy approach. The study compares program completers and dropouts released between 1984 and 1985.	Lt3 0 105 156 5.0 Cs	- - - -	- - - -
Hersh, Keith, Baldwin, Kevin, and Gray-Little, Bernadette. (1999). "Treatment Completion and Recidivism Among Incarcerated Sex Offenders." Paper presented at the Annual Conference of the Association for the Treatment of Sexual Abusers. Orlando, Florida. This study uses archival data to look at factors that may predict treatment completion in a 20 week prison based study in North Carolina. This study provides a comparison of the recidivism of program completers and noncompleters.	Lt3 0 285 100.1 2.7 Al	- - - -	- - - -
Hall, Gordon C. Nagayama. (1995). "The Preliminary Development of Theory-Based Community Treatment for Sexual Offenders." <i>Professional Psychology: Research and Practice</i> 26(5), 478-483. This study reports the results of a community-based treatment program focusing on relapse prevention. The results reported compare treatment completers and dropouts.	Lt3 0 17 13 1.2 Rev	- - - -	- - - -
Huat, Stephen J. (1997). "Sex Offender Treatment and Recidivism: Research Summary." St. Paul, MN: Minnesota Department of Corrections. This study by the Minnesota DOC reports the rates of recidivism for treated and untreated offenders released from prison in 1992. While the report notes that higher risk offenders are generally targeted for treatment, there is no information on the type of treatment, or on other differences between the two groups.	Lt3 0 92 159 4.5 As	- - - -	- - - -
Barnes, Jon M. and Peterson, Katherine D. (1997). The Kentucky Sex Offender Treatment Program, (March). This study reports the results from an evaluation of Kentucky's prison-based and community-based sex offender treatment programs. The comparison is between volunteer program completers (or almost completers) vs. untreated non-volunteer sex offenders.	Lt3 0 147 138 0.0 Cs	- - - -	- - - -
McGuire, T. J. (1999). Correctional institution based sex offender treatment: A lapse behavior study. Unpublished manuscript. This study of a Wisconsin cognitive behavioral sex offender treatment program compared program completers vs. dropouts. No information on the comparability of the two groups was reported.	Lt3 0 54 14 2.0 As	- - - -	- - - -
Stephenson, Marylee, of CS/RESORS Consulting Ltd. (1991). "An evaluation of Community Sex Offender Programs in the Pacific Region." Presented to the Correctional Service Canada, Regional Headquarters. This is an extensive evaluation of 8 community based sex offender treatment programs in the Pacific region of Canada, the first of which went into operation in 1984. A substantial portion of the comparison group received other community-based treatment, so it is difficult to isolate the effects of the Correctional Services treatment program.	Lt3 0 335 181 2.1 As	- - - -	- - - -
Fransblow, J. and Smiley, W.C. (1996). "Rational Emotive Behavior Therapy Applications to the treatment of sex offenders and violent offenders." Unpublished manuscript presented at the International Congress of Psychologists, Montreal, P.Q. This study reports the results from an eight month intensive treatment program for sex offenders and violent offenders. The comparison group for the treated sex offenders was federally incarcerated sex offenders and were only considered to be somewhat comparable to the treatment group (T group younger and at higher risk). Recidivism rates were estimated as no hard data on the comparison group were available.	Lt3 0 121 3748 ? As	- - - -	- - - -
Sero, Michael and Howard Barbaree. (1999). "Psychopathy, Treatment Behavior and Sex Offender Recidivism." <i>Journal of Interpersonal Violence</i> 14(12): 1235-1248. This is a study of offenders in Warkworth Sexual Behavioral Clinic between 1989-96. This study was designed to assess whether behavior in treatment is a predictor of recidivism. This research did not have	- 0 - -	- - - -	- - - -

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	Design Score	Researcher Role	N (Prog)	Follow-up (yrs)	Crime Outcome	ES	AdjES	p	Sig
Wilson, R., Stewart, L., Stirpe, T., Barrett, M., and Cripps, J. (2000). "Community-based sex offender management: Combining parole supervision and treatment to reduce recidivism." <i>Canadian Journal of Criminology</i> , Ottawa 42(2): 157-175. This research did not have a non-treatment comparison group.	-	0	-	-	-	-	-	-	-
Romero, Joseph J. and Linda M. Williams. (1983). "Group Psychotherapy and Intensive Probation Supervision with Sex Offenders: A Comparative Study." <i>Federal Probation</i> 47: 36-42. This study reports the results from the ten-year follow-up to a 1966 study of a community-based program which used group psychotherapy on recently paroled sex offenders, most of whom were considered to be violent. The treatment and comparison groups were randomly assigned and they were well-matched on pre-existing variables.	5	0	148	83	10.0	.As	.21	.21	.15 NS
Hanson, R. Kari, Steffy, R. A., and Gauthier, Rene. (1993). "Long Term Recidivism of Child Molesters." <i>Journal of Consulting and Clinical Psychology</i> 61: 646-652. This study reports the results of an in-prison program using individual and group counseling for child molesters in Ontario between 1965-1973. The result reported here is the treatment group vs. "control group 2" which was a better match to the treatment group.	3	0	106	60	19.0	Cs	.23	.11	.16 NS
Nutbrown, V., and Stasiak, E. (1987). Research monograph: A retrospective analysis of O.C.I. cost effectiveness 1977-1981. Ontario's Correctional Institute. This study reports the result from an evaluation of a treatment program at the Ontario Correctional Institute for mentally-disordered offenders. The results shown here are for the violent sex offender subgroup in the overall evaluation. The treatment and control subgroups matched well on pre-existing differences.	3	0	59	11	3.0	Rc	-.68	-.34	.03 S**
Berlin, Fred S. et.al. (1991). "A Five-Year Plus Follow-up survey of criminal recidivism within a treated cohort of 406 Pedophiles, 111 Exhibitors and 109 sexual aggressives: Issues and Outcome." <i>American Journal of Forensic Psychiatry</i> 12(3): 5-28. This study reports the results of a retrospective survey of 3 subsets of patients seen in a community-based treatment program (Johns Hopkins Sexual Disorders Clinic) which utilized various forms of treatment from individual psychotherapy to testosterone lowering medication. The results presented here are for pedophiles and compares recidivism rates for those compliant with treatment and those not compliant.	L13	0	257	206	6.1	As	-	-	-
Bluglass, Robert. "Indecent Exposure in the West Midlands" in West (1980) <i>Sex Offenders in the Criminal Justice System: Papers presented to the 12th Cropwood Round Table Conference</i> , Cambridge, 1980. This study, of a community-based program, did not have a matched comparison group.	L13	0	43	57	5.0	Cs	-	-	-
Evaluation of Sex Offender Rehabilitation Programs in the State of Florida (1977). Department of Health and Rehabilitative Services, Mental Health Program Office, Tallahassee, FL. This study reports the results from an evaluation of two state-run facilities treating mentally disordered sex offenders. The results reported here combine the two hospitals into one category (the treatment group) and compare them to an untreated prison cohort (not considered to be mentally disordered).	L13	0	74	199	0.0	AI	-	-	-
Davidson, Paul R. (1984). "Behavioral treatment for incarcerated sex offenders: post-release outcome." Paper presented at Conference at Kingston, Ontario, Canada, March. This study reports the results from an in-prison behavioral and psychotherapeutic treatment program. A stratified random sample of control subjects was selected on the basis of the victim's sex, age and relationship to the offender. The effects shown here are taken from the evaluation's survival curves at a three-year follow up.	3	0	101	101	3.0	Ct	-.22	-.11	.12 NS
Davidson, Paul R. (1984). "Behavioral treatment for incarcerated sex offenders: post-release outcome." Paper presented at Conference at Kingston, Ontario, Canada, March. This study reports the results from an in-prison behavioral and psychotherapeutic treatment program. A stratified random sample of control subjects was selected on the basis of the victim's sex, age and relationship to the offender. The effects shown here are taken from the evaluation's survival curves at a three-year follow up.	3	0	101	101	3.0	Cs	-.05	-.03	.71 NS

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information	Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)	Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)
Adult Sex Offender Treatment—Chemical Treatment	Research Design Information	ES AdjES p Sig	ES AdjES p Sig
Rice, Marnie E., Quinsey, Vernon L., Harris, Grant T. (1991). "Sexual Recidivism Among Child Molesters Released from a Maximum Security Psychiatric Institution." <i>Journal of Consulting and Clinical Psychology</i> 59: 381-386. This study reports the results of a behavioral treatment program for child molesters conducted in a maximum security psychiatric institution between the years 1972-83 in Ontario. We adjusted the reported outcomes to account for the difference in average follow-up time between the treatment group (45.7 months) and the comparison group (30.3 months).	Design Score N (Prog) N (Comp) Follow-up (yrs) Crime Outcome N (Comp)	3 0 29 29 3.8 Cs - - - - .18 -.09 .49 NS	- - - - - -
Marshall, W. L., Eccles, A., and Barbaree, H. E. (1991). "The Treatment of Exhibitionists: A Focus on Sexual Deviancy versus Cognitive and Relationship Features." <i>Behav. Res. Ther.</i> 29(2): 129-135. This study reports the results of a comparison of two treatment programs, one focused on modifying sexual preferences and the other on changing cognitions, improving pro-social behavior and increasing awareness of relapse prevention issues. The results reported here are for the first program focusing on modifying sexual preferences. The same control group was used in the both programs. Both the treatment group and control group admitted they had a problem and expressed a desire for treatment, but those used in the control group lived too far away to participate.	Design Score N (Prog) N (Comp) Follow-up (yrs) Crime Outcome N (Comp)	L13 0 17 21 3.9 Ccs - - - - -	- - - - -
Kramer, S. P. (1985). Sex offender treatment and tracking: problems, perspectives and outcomes in the Utah criminal justice system. Unpublished manuscript. This study reports the results of a token economy program. The study compared program those with at least 12 months of treatment with those with less than 12 months of treatment. No information was provided on the comparability of the two groups or the nature of the recidivism measure. The time at risk for the treatment group was 25 months compared to about 15 months for the comparison groups.	Design Score N (Prog) N (Comp) Follow-up (yrs) Crime Outcome N (Comp)	L13 0 37 19 ? ? - - - - -	- - - - -
Fedoroff, J., Paul, Wisner-Carlson, Robert, Dean, Sharon, and Berlin, Fred S. (1992). "Methoxy-Progesterone Acetate in the Treatment of Paraphilic Sexual Disorders." <i>Journal of Offender Rehabilitation</i> 8 (3/4): 109-123. This study reports the results of an out-patient sexual treatment program which uses a combination of group therapy and chemical (MPA) treatment. Participants in both treatment and comparison groups were highly motivated having been in therapy for at least 5 years. Chemical treatment was voluntary. The majority of subjects were pedophiles. The degree to which the two groups were matched is indeterminate.	Design Score N (Prog) N (Comp) Follow-up (yrs) Crime Outcome N (Comp)	L13 0 27 19 7.0 Ss - - - - -	- - - - -
Meyer, Walter J., Collier, Cole, and Emory, Evangeline. (1992). "Depo Provera Treatment for Sex Offending Behavior: An Evaluation of Outcome." <i>Bull Am Acad Psychiatry Law</i> 20(3): 249-259. This study reports the results of an out-patient treatment program at the Rosenberg Clinic at the University of Texas. Patients were treated with a combination of chemical (MPA) therapy in conjunction with the individual psychotherapy and group therapy. The majority of subjects were pedophiles. The comparison group was made up of patients at the clinic who refused the chemical treatment.	Design Score N (Prog) N (Comp) Follow-up (yrs) Crime Outcome N (Comp)	L13 0 40 21 10.0 Ss - - - - -	- - - - -
Maleizky, B. (1991). "The use of medroxyprogesterone acetate to assist in the treatment of sexual offenders." <i>Annals of Sex Research</i> 4: 117-129. This study reports the results of the first cases at an out-patient sexual abuse clinic to receive injections of testosterone moderating MPA. A variety of cognitive behavioral and group therapy was also used. Despite randomly selecting the comparison group, the two groups were not well matched on key offense parameters; the treatment group was ostensibly at higher risk.	Design Score N (Prog) N (Comp) Follow-up (yrs) Crime Outcome N (Comp)	L13 0 99 100 3.0 Urs - - - - -	- - - - -
Willie, R., and Beier, K. M. (1989). Castration in Germany. <i>Annals of Sex Research</i> 2: 103-133. This study reports the results a group of voluntary castrates in Germany from 1970-1980 vs. a comparison group who voluntarily applied for castration during the same period but ultimately did not have the surgery. Two-thirds of the subjects were pedophiles.	Design Score N (Prog) N (Comp) Follow-up (yrs) Crime Outcome N (Comp)	3 0 99 35 10.8 As - - - - -	- - - - -
Willie, R., and Beier, K. M. (1989). Castration in Germany. <i>Annals of Sex Research</i> 2: 103-133. This study reports the results a group of voluntary castrates in Germany from 1970-1980 vs. a comparison group who voluntarily applied for castration during the same period but ultimately did not have the surgery. Two-thirds of the subjects were pedophiles.	Design Score N (Prog) N (Comp) Follow-up (yrs) Crime Outcome N (Comp)	3 0 99 35 10.8 Ans - .37 -.19 .05 S*	- - - - -
Life Skills Programs			

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information			Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)			Difference in the Mean Number of Offenses (of the proportion that Offend or offend)		
	Design Score Researcher Role N (Prog) N (Comp)	Follow-up (yrs) Crime Outcome N (Comp)	ES AdjES p Sig	ES AdjES p Sig	ES AdjES p Sig	ES AdjES p Sig	ES AdjES p Sig	ES AdjES p Sig	ES AdjES p Sig
Notes to Information Listed: The "Design Score" is a measure of the overall level of confidence that can be placed in the findings based on how the evaluation was designed—a "5" is the highest score, "1" is the lowest. "Researcher Role" is whether the program was carried out by the treatment (1) or whether it was a "real world" program (0). "N(Prog)" and "N(Comp)" are the numbers in the treatment and comparison groups. "Follow-up (yrs)" is the follow up time in years. "Crime Outcome" is a code for the type of recidivism measure used in the study. "ES" is the mean difference effect size approximated from proportion data (dichotomous group recidivism rates) using the arcsine transformation and adjusted using the Hedges correction for small sample sizes as described in Lipsey & Wilson (2000). "AdjES" is the institute-adjusted effect size; p is the significance level; and "Sig" indicates significance levels (NS=p>.10; S=p>.05; S**=p<.01; S***=p<.01).									
Neiton, Roni and Pennell, Susan. (1998). "Staying Out Successfully: An Evaluation of an In-custody Life Skills Training Program." San Diego, Calif: Association of Governments. Staying out successfully, in San Diego county used case management a life skills program designed to improve basic life skills functioning of inmates so they could function and participate more productively in community, once released.	5 0 147	188 1.0 At	0.00 0.00 1.0 NS 0	-	-	-	-	-	-
Ross, Robert R., Fabiano, Elizabeth A., and Ewles, Crystal D. (1988). "Reasoning and Rehabilitation," International Journal of Offender Therapy and Comparative Criminology 32: 29-35. This is the life skills group vs. regular probation. The treatment group may be completers only, it is hard to tell from the write up.	4 0 17	23 0.8 Ct	-0.45 -0.34 .15 NS	-	-	-	-	-	-
Jolin, Annette, Day, Michael, Christensen, Kristin, Friedman, Sharon, Newton, Sophie, and Hooper, Richard. (1997). An Evaluation of the WICSW-Lifeskills Program for women at the Columbia River Correctional Institution: Preliminary Results. Portland State University, College of Urban and Public Affairs. This evaluation looked only at the results of program graduates vs. a comparison group. The results reported here were from the authors' logistic regression used to control for pre-existing differences, unfortunately not controls were used for prior criminal history.	13 0 187	292 2.2 Ct	- -	-	-	-	-	-	-
Fines									
Turner, S., Greene, J. (1999). "The FARE probation experiment: implementation and outcomes of day fines for felony offenders in Maricopa County." The Justice System Journal 21(1): 1:21. This research reports on a day fine program in Maricopa County AZ, designed to be an intermediate sanction in lieu of routine probation for low-risk offenders. The results reported here are from the authors' logistic regression analysis to control for pre-existing differences.	3 0 191	191 1.0 At	-0.10 -0.05 .34 NS	-	-	-	-	-	-
Adult Drug Treatment Programs in Jails									
Dugan J. R. and Everett, R. S. (1998). "An Experimental Test of Chemical Dependency Therapy for Jail Inmates." International Journal of Offender Therapy and Comparative Criminology 42(4): 360-368. This result is for a Chelan County, Washington jail program. The result reported here incorporates two adjustments to the authors' findings: one adjusts for the different lengths of follow up time, the second adjustment estimates the authors' multivariate effect since all the details were not presented in the report.	5 0 61	56 2.3 At	0.26 0.26 .17 NS	-	-	-	-	-	-
Peters, Roger H., Kearns, William D., Murrin, Mary R., Dolente, Addis S., and May, Robert L. (1993). "Examining the Effectiveness of In-Jail Substance Abuse Treatment," Journal of Offender Rehabilitation 19: 1-39. This program, in the Hillsborough county jail (Tampa, Florida) includes a 6-week drug treatment program, primarily for sentenced offenders. The curriculum emphasizes the development of cognitive-behavioral and relapse prevention skills. TASC counselors do the intake assessment, develop a follow-up treatment, initial appointments, and monitor community treatment participation. The comparison group included inmates who requested to participate in treatment at booking or while incarcerated, but there were lack of available slots or in the pre-trial hearing received a non-jail disposition. The groups were similar in age, race, and sex, prior arrests and months of prior incarceration. The treatment group had a significantly higher number of arrests in year prior to incarceration.	3 0 168	252 1.0 At	-0.11 -0.05 .29 NS	-	-	-	-	-	-
Tunis, S., Austin, J., Morris, M., Hardymon, P., and Bolyard, M. (1996). Evaluation of Drug Treatment in Local Corrections. Washington DC: National Institute of Justice (May). This is the result for the Los Angeles County site. Treatment participants are compared to a comparison group matched on age, race, offense, and sentence length.	3 0 98	52 1.0 Ct	-0.27 -0.13 .11 NS	-	-	-	-	-	-
Tunis, S., Austin, J., Morris, M., Hardymon, P., and Bolyard, M. (1996). Evaluation of Drug Treatment in Local Corrections. Washington DC: National Institute of Justice (May). This is the result for the Contra Costa County site. Treatment participants are compared to a comparison group matched on age, race, offense, and sentence length.	3 0 143	121 1.0 Ct	-0.29 -0.15 .02 S**	-	-	-	-	-	-
Tunis, S., Austin, J., Morris, M., Hardymon, P., and Bolyard, M. (1996). Evaluation of Drug Treatment in Local Corrections. Washington DC: National Institute of Justice (May). This is the result for the Santa Clara County site. Treatment participants are compared to a comparison group matched on age, race, offense, and sentence length.	3 0 87	72 1.0 Ct	-0.30 -0.15 .06 S*	-	-	-	-	-	-

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information			Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)			Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)				
	Researcher Role	N (Prog)	N (Comp)	ES	AdjES	P	Sig	ES	AdjES	P	Sig
Notes to Information Listed: The "Design Score" is a measure of the overall level of confidence that can be placed in the findings based on how the evaluation was designed—a "5" is the highest score, "1" is the lowest. "Researcher Role" is whether the program was carried out by the developer (1) or whether it was a "real world" program (0). "N(Prog)" and "N(Comp)" are the numbers in the treatment and comparison groups. "Follow-up (yrs)" is the follow up time in years. "Crime Outcome" is a code for the type of recidivism measure used in the study. "ES" is the mean difference effect size approximated from proportion data (dichotomous group recidivism rates) using the arcsine transformation and adjusted using the Hedges correction for small sample sizes as described in Lipsey & Wilson (2000). "AdjES" is the institute-adjusted effect size; p is the significance level; and "Sig" indicates significance levels (NS=p>.10; S=>.05; S**=>.01; S***=>.001).											
Tunis, S., Austin, J., Morris, M., Hardyman, P. and Bolyard, M. (1996). Evaluation of Drug Treatment in Local Corrections. Washington DC: National Institute of Justice (May). This is the result for the New York City site. Treatment participants are compared to a comparison group matched on age, race, offense, and sentence length.	3	0	172	202	1.0	Ct	-0.03	-0.01	.81	NS	-
Tunis, S., Austin, J., Morris, M., Hardyman, P. and Bolyard, M. (1996). Evaluation of Drug Treatment in Local Corrections. Washington DC: National Institute of Justice (May). This is the result for the Westchester County site. Treatment participants are compared to a comparison group matched on age, race, offense, and sentence length.	3	0	77	89	1.0	Ct	0.00	0.00	1.0	NS	-
Hughley, R., Klemtke, L. W. (1996). "Evaluation of a jail-based substance abuse treatment program." Federal Probation 60(4): 40-45. This research reports on a 5-week drug and alcohol treatment program, with outpatient aftercare, at the Linn County Oregon jail. There were some pre-existing differences in the treatment and comparison groups, not controlled in the analysis, and any differences in the follow-up times for the two groups were not reported.	Lt3	0	260	134	3.5	At	-	-	-	-	-
Work Release Programs											
Turner, S. M. and Petersilia, J. (1996). "Work Release in Washington: Effects on Recidivism and Corrections Costs." Prison Journal 76(2): 138-164. This research evaluated Washington's work release program. The evaluation supplemented random assignment with a matched group; there were pre-existing differences and the control group was significantly worse prior criminal history and unemployment. Counteracting this, however, the treatment group was at-risk (on the street) for 10 months compared to 7 months for the comparison group.	3	0	112	106	0.8	At	-0.18	-0.09	.18	NS	-
Whitte, A. D. (1977). "Work release in North Carolina—a program that works!" Law and Contemporary Problems 41(1): 230-251. This research examined the work release program in North Carolina that served felons and misdemeanants. Information on how well the comparison group matched the work release group was not provided in the research report, but some statistical differences were noted. A multiple regression model was developed to test whether work release participants, after controlling for other factors, had less serious types of reoffenses. The author states that the analysis shows offenses were less serious, but the statistical results were not reported in the article.	Lt3	0	297	344	3.0	At	-	-	-	-	-
Sommers, P., Mauldin, B., Levin, S. (2000). Pioneer Human Services: A case study. Seattle: University of Washington, Daniel J. Evans School of Public Affairs. This research compared the recidivism effects of offenders in work-release at Pioneer Human Services with those at other work release facilities. It is not a test of work release vs. non work release.	Lt3	0	0	0	0.0	0.00	0.00	0.00	0	-	-
Walido, G. P. and Chiricos, T. G. (1977). "Work release and recidivism: an empirical evaluation of a social policy." Evaluation Quarterly 1(1): 87-108. This research evaluated Florida's work release program. The study reported 18 measures of recidivism, none of which had a significant difference between the randomly assigned work release and control groups.	5	0	98	48	2.0	Sa	0.08	0.08	.65	NS	-
Job Counseling & Job Search for Inmates Leaving Prison											
Milkman, R. H. (1985). "Employment Services for Ex-Offenders Field Test—Detailed Research Results." McLean, VA: Lazar Institute. The experiment tested whether post-prison intensive job counseling and placement services reduced recidivism. This is the result for Boston site.	5	0	174	125	2.0	At	-0.01	-0.01	.96	NS	-
Milkman, R. H. (1985). "Employment Services for Ex-Offenders Field Test—Detailed Research Results." McLean, VA: Lazar Institute. The experiment tested whether post-prison intensive job counseling and placement services reduced recidivism. This is the result for Chicago site.	5	0	244	219.15	2.0	At	-0.10	-0.10	.27	NS	-
Milkman, R. H. (1985). "Employment Services for Ex-Offenders Field Test—Detailed Research Results." McLean, VA: Lazar Institute. The experiment tested whether post-prison intensive job counseling and placement services reduced recidivism. This is the result for San Diego site.	5	0	147	67.961	2.0	At	-0.27	-0.27	.06	S*	-
Mata, C. D., and Thornton, C. (1978). "Transitional Aid for Released Prisoners: Evidence From the Life Experiment." The Journal of Human Resources XIII(2): 208-226. The experiment (the LIFE program) tested whether post-prison financial aid and/or job placement services reduced recidivism. This effect is for the job counseling element.	5	0	108	108	1.0	Ap	0.04	0.04	.78	NS	-

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects

	Research Design Information	Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)						Difference in the Mean Number of Offenses (of the proportion that Offend or offend)		
		Desigrn Score	N (Prog)	N (Comp)	Follw-up (yrs)	Crime Outcome	ES	AdjES	P	Sig
Nenon, R., Blakely, C., Carmichael, D., and Snow, D. (1995). "Making a dent in recidivism rates: Impact of employment on minority ex-offenders." In Thomas, G., E. (1995). Race and ethnicity in America: Meeting the challenge in the 21st century. Washington, D.C.: Taylor and Francis, pp 279-293. See also, Finn, P. (1996). Texas' Project Rio (re-integration of offenders), Washington, D.C.: U.S. Department of Justice, June 1998. Project Rio is a major employment/training program in Texas. Inmates in prison work with job counselors, receive some within-prison vocational training and education. After release, the state employment office provides job search and counseling. The finding reported here is for the average program participant. The study found a bigger effect on recidivism for higher risk offenders than lower risk offenders. The result listed is from the authors logistic regression to control for pre-existing differences (the two groups matched well).	3	0	2714	3825.3	1.0	At	-0.06	-0.03	.02	S**
Clark, P., Harter, S., Ford, E. (1992). "An Experiment in Employment of Offenders." Paper presented at the Annual Meeting of the American Society of Criminology, New Orleans, Louisiana. The program provided enhanced employment development services for offenders released from state prison. Random assignment was used but the outcome measure and short follow up period limit the usefulness of the findings.	3	0	30	30	0.5	Rei	-0.48	-0.24	.07	S*
Latessa, E. J. and Travis, L. F. (1991). "Halfway House or Probation: A Comparison of Alternative Dispositions." Journal of Crime and Justice 14(1). This research compared adult offenders placed in a halfway house (with increased services), in lieu of probation.	Lt3	0	132	140	3.0	0.00	-	-	-	-
Short-term Financial Assistance for Inmates Leaving Prison										
Berk, R. A., Lenihan, K. J., and Rossi, P. H. (1980). "Crime and Poverty: Some Experimental Evidence from Ex-Offenders." American Sociological Review 45: 766-786. The experiment (the TARP program) tested whether post-prison payments (unemployment insurance-type) and/or job placement services reduced recidivism.	5	0	0	0	1.0	At	-	-	-	-
Malin, C. D. and Thornton, C. (1978). "Transitional Aid for Released Prisoners: Evidence From the Life Experiment." The Journal of Human Resources XIII(2): 208-236. The experiment (the LIFE program) tested whether post-prison financial aid and/or job placement services reduced recidivism. This effect is for the financial aid element.	5	0	108	108	1.0	Ap	-0.15	-0.15	.28	NS
Subsidized Jobs for Older Inmates Leaving Prison										
Uggen, Christopher. (1996). "Estimating the True Effect of Work on Crime: A Dynamic Analysis of Supported Employment and Desistance." Unpublished paper. The study evaluates the National Supported Work Demonstration Project. The project was for ex-offenders in the mid-1970s from seven US cities. Random assignment was used with the treatment group offered the opportunity to take part in a subsidized job program. This result is for older adult (more than 27 years old) offenders.	5	0	256	254.5	3.0	At	-0.24	-0.24	.01	S***
Uggen, Christopher. (1996). "Estimating the True Effect of Work on Crime: A Dynamic Analysis of Supported Employment and Desistance." Unpublished paper. The study evaluates the National Supported Work Demonstration Project. The project was for ex-offenders in the mid-1970s from seven US cities. Random assignment was used with the treatment group offered the opportunity to take part in a subsidized job program. This result is for younger adult (less than 27 years old) offenders.	5	0	516	516	3.0	At	-	-	-	-
Moral Reconciliation Therapy										
Little, G. L., Robinson, K. D., Burnette, K. D., and Swan, E. S. (1998). "Nine-Year Recarceration Study on MRT-Treated Felony Offenders: Treated Offenders Show Significantly Lower Recarceration." Cognitive Behavioral Treatment Review 7(1): 2-3. This study reports the results of MRT in the Shelby County Corrections Center in Memphis. Both treatment and comparison groups volunteered for the program. The volunteers were randomly assigned to MRT and the comparison group due to the limited number of treatment slots available. The results for the MRT group include completers and non-completers. Information on any pre-existing differences after random assignment was not provided, but the two groups had similar racial characteristics, age, and pre-treatment arrest records/sentence.	5	1	1052	329	5.0	Rei	-0.30	-0.15	.00	S***
Grandberry, G. (1998). "Moral Reconciliation Therapy Evaluation, Final Report." Olympia Washington State Department of Corrections. The study is of 109 offenders in Washington State who participated in MRT from 2-94 to 9-95. MRT participants were compared to matched sample of offenders on active supervision but not receiving MRT. MRT group includes both completers and noncompleters. The author notes that the groups 'closely resemble each other in terms of demographics and crime categories.'	3	0	109	101	1.0	At	0.09	0.04	.52	NS

Table IV-K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects

Notes to Information Listed:	Design Score	Research Design Information	Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)			Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)				
			ES	AdjES	p	Sig	ES	AdjES	p	
Little, G. L., Robinson, K. D., Burnette, K. D. (1993). "Cognitive behavior treatment of felony drug offenders: a five-year recidivism report." <i>Psychological Reports</i> 73: 1089-1090.	3	1	.70	.82	1.0	At	-.09	-.02	.57	NS
In this quasi-experimental study, both treatment and comparison groups volunteered for the program; the comparison group did not receive treatment due to the limited number of treatment slots available. The results for the MRT group include completers and non-completers. The two groups had similar racial characteristics, age, and pre-treatment arrest records/sentence.	3	1	115	65	1.0	At	-0.25	-0.06	.11	NS
Little, G. L., Robinson, K. D., Burnette, K. D. (1993). "5% recidivism results on MRT-treated DWI offenders released." <i>Cognitive Behavioral Treatment Review</i> 2(4): 2. This study reports the results of MRT for DWI offenders. In this quasi-experimental study, both treatment and comparison groups volunteered for the program; the comparison group did not receive treatment due to the limited number of treatment slots available. The results for the MRT group include completers and non-completers. The two groups had similar racial characteristics, age, and pre-treatment arrest records/sentence.	3	1	28	25	1.0	Cpc	0.27	0.20	.32	NS
Milner, Marsha L. (1997). "Evaluation of the Life Skills Program." Division of Correctional Education, Department of Corrections, Delaware, Wilmington, Delaware. This study reports the results of a Life Skills Program (at its core the program is MRT) at Delaware's Gardner-Hill Correctional Institution, first program cycle. Both treatment and comparison groups volunteered for the program. The volunteers were randomly assigned to MRT and the comparison group. The MRT group included completers and non-completers. Information on any pre-existing differences after random assignment was not provided.	4	0	27	23	1.0	Cpc	-0.19	-0.14	.49	NS
Milner, Marsha L. (1997). "Evaluation of the Life Skills Program." Division of Correctional Education, Department of Corrections, Delaware, Wilmington, Delaware. This study reports the results of a Life Skills Program (at its core the program is MRT) at Delaware's Sussex Correctional Institution, first program cycle. Both treatment and comparison groups volunteered for the program. The volunteers were randomly assigned to MRT and the comparison group. The MRT group included completers and non-completers. Information on any pre-existing differences after random assignment was not provided.	4	0	28	25	1.0	Cpc	0.27	0.20	.32	NS
Burnett, Walter. (1997). "Treating Post-Incarcerated Offenders with Moral Reconation Therapy: A One-Year Recidivism Study." <i>Cognitive Behavioral Treatment Review</i> 6(3/4): 2. This research reports the results of MRT in the Washington State. The research used a comparison group matched on age, gender, ethnicity, and sentence length. No tests of significance for differences in these characteristics were reported.	3	0	30	30	1.0	At	-0.28	-0.14	.28	NS
Amstrong, T. (2000). The effect of Moral Reconation Therapy on the recidivism of youthful offenders. Paper presented at 2000 American Society for Criminology Conference, San Francisco. This randomized study tests MRT in Baltimore for youthful (average age was 20 years old) offenders. The effect of MRT was estimated with the author's proportional hazards model.	5	0	110	102	0.0	0.00	0.06	0.06	.65	NS
Godwin, Greg., Stone, Sharon, and Hambrock, Kenneth. (1995). "Recidivism Study: Lake County, Florida Detention Center." <i>Cognitive Behavioral Treatment Review</i> 4(3): 12. This research reports the results of MRT in the Lake County (Florida) Detention Center. No information was provided on how well the comparison group matched the treatment group.	Lt3	0	98	5119	2.0	Rei	-	-	-	-
Krueger, Sally. (1997). "Five-Year Recidivism Study of MRT-Treated Offenders in a County Jail," <i>Cognitive Behavioral Treatment Review</i> 6(3/4): 3. This research reports the results of MRT in the Lucas County (Ohio) Jail. No information was provided on how well the comparison group matched the treatment group.	Lt3	0	159	25	4.0	At	-	-	-	-
Brame, Robert, Mackenzie, Doris, Waggoner, Arnold R., and Robinson, Kenneth D. 1996. "Moral Reconation Therapy and Problem Behavior in the Oklahoma Department of Corrections." < http://www.doc.state.ok.us/DOD/CDCJRC/Cdcjc96/Ocjrc63.htm >	Lt3	0	2788	21515	-	-	-	-	-	-
Reasoning and Rehabilitation										
Robinson, D. (1995). "The Impact of Cognitive Skills Training on Post-Release Recidivism Among Canadian Federal Offenders." Research Report, Correctional Research and Development, Correctional Service Canada. This Canadian prison program uses cognitive skills training. Random assignment was used to form the treatment and control groups, but the random assignment was abandoned during the final two years of the study. The treatment group includes program completers and dropouts combined.	4	0	1746	379	1.0	Ct	-0.08	-0.06	.13	NS
Ross, R., Fabiano, E. A., and Ewles, C. D. (1988). "Reasoning and Rehabilitation." <i>International Journal of Offender Therapy and Comparative Criminology</i> 32: 29-36. This research compares the results for a community-based R&R cognitive behavioral program vs. regular probation. The groups were randomly assigned but the treatment group had a higher rate of previous convictions.	4	1	22	23	0.8	Ct	-1.07	-0.40	.00	S***

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects		Research Design Information		Difference in the proportion of offenders v. non-offenders		Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)			
		Design Score	Researcher Role	N (Comp)	Follow-up (yrs)	ES	AdjES	p	Sig
Johnson, G. and R.M. Hunter. (1995). "Evaluation of the Specialized Drug Offender Program," pp. 214-234 in Ross, R. R. and Ross, R. D., <i>Thinking Straight: The Reasoning and Rehabilitation Program for Delinquency Prevention and Offender Rehabilitation</i> . Ottawa: Air Training and Publications. This evaluations assesses the Specialized Drug Offender Program (SDOP)—an intensive supervision probation program for drug offenders, accompanied by R&R cognitive and lifeskills group sessions. This result reports the treatment program vs. regular probation. The groups were randomly assigned, but the outcome measure was parole revocations.		5	0	32	23	1.0	Rev	-0.36	-0.36 .18 NS
Porporino, F. J. and Robinson, David. (1995). "An Evaluation of the Reasoning and Rehabilitation Program with Canadian Federal Offenders." Chapter 8 in Ross, R. R. and Ross, R. D., <i>Thinking Straight: The Reasoning and Rehabilitation Program for Delinquency Prevention and Offender Rehabilitation</i> . Ottawa: Air Training and Publications. This research reports the results of the Reasoning and Rehabilitation program. The comparison group contains offenders who were selected and volunteered for Cognitive Skills Training but did not participate (because of limited program space). The authors note that the two groups matched well.		3	0	44	20	2.7	Rc	-0.40	-0.20 .13 NS
Raynor, Peter and Vansstone, M. (1996). "Reasoning and Rehabilitation in Britain: The Results of the Straight Thinking on Probation (STOP) Programme," <i>International Journal of Offender Therapy and Comparative Criminology</i> 40(4): 272-284. The results reported here are for serious re-offences for the treatment vs. "combined custodial" comparison group which the authors stated offered a close comparison.		3	0	107	164	2.0	Cf	0.05	0.02 .70 NS
Knott, Christine. (1995). <i>The STOP Programme: Reasoning and Rehabilitation in a British Setting</i> . In McGuire, J. (ed.), <i>What Works: Reducing Reoffending: Guidelines from Research and Practice</i> . London: John Wiley and Sons. Reasoning and rehabilitation program. The research design did not meet the necessary standards to report effect size.		L13	0	130	100	1.0	Ct	-	- -
Robinson, S. C. (1994). Implementation of the cognitive model of offender rehabilitation and delinquency prevention. Dissertation: University of Utah, UMI. This study of R&R for juvenile offenders compared completers to a sample of those in the same institution before R&R was implemented, using logistic regression to control for pre-existing differences.		L13	0	73	64	0.5	At	-	- -
Other Cognitive Behavioral Therapy									
Henning, K. R., and Fusch, B. C. (1996). "Cognitive-Behavioral Treatment of Incarcerated Offenders: An Evaluation of the Vermont Department of Corrections' Cognitive Self-Change Program." <i>Criminal Justice and Behavior</i> 23(4): 523-541. This study reports the results of a prison-based cognitive behavioral program. The result reported here is the Cox regression analysis to account for pre-existing differences between the treatment and control groups.		3	0	55	141	3.0	Ccv	-0.25	-0.12 .11 NS
Adult Basic Education									
Piehl, A. M. (1995). "Learning While Doing Time." <i>John F. Kennedy School of Government, Cambridge, MA</i> . The study tested whether the recidivism of male inmates in Wisconsin was reduced by those completing basic education in prison. Sample selection bias techniques were used along with other covarying variables. The methods score is set at 3 instead of 4 because the statistical analysis focused on program completers only.		3	0	212	1261	3.0	Rei	-0.17	-0.08 .03 S**
Walsh, A. (1985). "An Evaluation of the Effects of Adult Basic Education on Recert Rates Among Probationers." <i>Journal of Offender Counseling, Services, and Rehabilitation</i> 9: 69-76. This matched group study compared GED program participants vs. a comparison group matched only on age and a "criminal seriousness" scale to measure offense history. The result shown here for the treatment group combines program completers and non-completers.		3	0	50	50	3.5	At	-0.42	-0.21 .03 S**

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information			Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)			Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)		
	Design Score	Researcher Role	N (Prog)	Follow-up (yrs)	Crime Outcome	ES	AdjES	p	Sig
Notes to Information Listed: The "Design Score" is a measure of the overall level of confidence that can be placed in the findings based on how the evaluation was designed—a "5" is the highest score, "1" is the lowest. "Researcher Role" is whether the program was carried out by the developer (1) or whether it was a "real world" program (0). "N(Prog)" and "N(Control)" are the numbers in the treatment and comparison groups. "Follow-up (yrs)" is the follow up time in years. "Crime Outcome" is a code for the type of recidivism measure used in the study. "ES" is the mean difference effect size approximated from proportion data (dichotomous group recidivism rates) using the arcsine transformation and adjusted using the Hedges correction for small sample sizes as described in Lipsey & Wilson (2000). "AdjES" is the institute-adjusted effect size, p is the significance level, and "Sig" indicates significance levels (NS=p>.10; S=p>.05; S**=p<.01; S***=p<.001).									
Adams K., Bennett, T., Flanagan, T. J., Marquart, J., Cuvelier, S., Fritsch, E. J., Gerber, J., Longmire, D., and Burton, V. (1994). A Large-Scale Multidimensional Test of the Effect of Prison Education Programs on Offender Behavior. "The Prison Journal" 74: 433-449. This study examined the postrelease recidivism of inmates released from Texas prisons, some of whom received academic educational programming. Insufficient information was provided to calculate how well the groups matched, although the academic program participants appeared to have significantly lower IQ and lower educational attainment. Selection into the program was not controlled, nor were multivariate techniques employed to control for other pre-existing differences.	Lt3	0	5051	4000	2.0	Rei	-	-	-
Anderson, S. V. (1985). "Evaluation of the Impact of Correctional Education Programs on Recidivism." Ohio Department of Rehabilitation and Correction, October 1985. The results reported here are for the combined GED and Adult Basic Education groups vs. a comparison group. No information was provided on how well the treatment and comparison groups matched on critical pre-existing variables.	Lt3	0	2363	15705	2.0	Rei	-	-	-
Poropino, F. J. and Robinson, R. (1992). "The Correctional Benefits of Education: A Follow-Up of Canadian Federal Offenders Participating in ABE." "Journal of Correctional Education" 43(2): 92-98. The study did not have a no-treatment comparison group, and multivariate analyses were not performed for the pre-existing differences between the treatment groups.	Lt3	0	-	-	1.1	Rei	-	-	-
Stevens, R. D. (1986). "The Effect on Recidivism of Attaining the General Education Diploma." "Journal of Offender Counseling, Services, and Rehabilitation" (October): 3-9. The study examined males released from Georgia prison who participated in GED programs. There were significant differences in pre-existing variables, and the study did not control for these differences. The treatment group reported here combines program completers and dropouts.	Lt3	0	2047	2318	2.0	Rei	-	-	-
Schumacker, R. E., Anderson, D. B., and Anderson, S. L. (1990). "Vocational and Academic Indicators of Parole Success." "Journal of Correctional Education" 41(1): 8-13. This matched group study did not provide information on how well the treatment and comparison groups matched on important pre-existing factors.	Lt3	0	248	287	1.0	Orc	-	-	-
Adult in-Prison Vocational Education									
Lattimore, P. K., Witte, A. D., Baker, J. R. (1990). "Experimental assessment of the effect of vocational training on youthful property offenders." "Evaluation Review" 14(2): 115-133. The program was for 18- to 22-year-old male property offenders. The result reported here is from the authors' survival analysis. The research had random assignment, but there was not as much difference in programming as planned between the treatment and control groups. The result reported here is from the study's survival analysis.	4	0	138	109	1.6	At	-0.20	-0.15	.12 NS
Saylor, W. G., Gees, G. G. (1996). "PREP: A Study of "Rehabilitating" Inmates Through Industrial Work Participation, and Vocational and Apprenticeship Training." "Federal Bureau of Prisons, Washington, D.C." This is the long-term follow up for the effect of the vocational training/apprentice programs only. Sample selection was controlled with a propensity score variable in the logistic regression.	4	0	1330	1330	10.0	Rei	-0.18	-0.13	.00 S***
Adams K., Bennett, T., Flanagan, T. J., Marquart, J., Cuvelier, S., Fritsch, E. J., Gerber, J., Longmire, D., and Burton, V. (1994). A Large-Scale Multidimensional Test of the Effect of Prison Education Programs on Offender Behavior. "The Prison Journal" 74: 433-449. This study examined the postrelease recidivism of inmates released from Texas prisons, some of whom received academic educational programming. Insufficient information was provided to calculate how well the groups matched, although the academic program participants appeared to have significantly lower IQ and lower educational attainment. Selection into the program was not controlled, nor were multivariate techniques employed to control for other pre-existing differences.	Lt3	0	422	4000	2.0	Rei	-	-	-
Van Stelle, K. R., Lidbury, J. R., and Moberg, D. P. (1995). "Final Evaluation Report, Specialized Training and Employment Project (STEP)." Wisconsin Department of Corrections, Center for Health Policy and Program Evaluation. STEP provides vocational training in the institution, support during the transition to the community, and assistance in obtaining and maintaining employment after release. The study had a random design but didn't have enough in the control group so some were added non-randomly. The crime-related results were only reported for the "graduates" not the dropouts.	Lt3	0	63	30	0.8	At	-	-	-
Anderson, S. V. (1985). "Evaluation of the Impact of Correctional Education Programs on Recidivism." Ohio Department of Rehabilitation and Correction, October. The results reported here are for the vocational education group vs. a comparison group. No information was provided on how well the treatment and comparison groups matched on pre-existing variables.	Lt3	0	630	17438	2.0	Rei	-	-	-

Table IV–K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information			Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)			Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)		
	Researcher Role	N (Prog)	N (Comp)	Follow-up (yrs)	Crime Outcome	ES	AdjES	p	Sig
Adult Correctional Industries									
Downes, E. A., Monaco, K. R., and Schreiber, S. O. (1989). "Evaluating the Effects of Vocational Education on Inmates: A Research Model and Preliminary Results." <i>The Yearbook of Correctional Education</i> : 249-262. The recidivism measure was those "unsuccessful at completing parole" which is not too good of an outcome measure. Half of the study sample did not have a yes or no outcome. Of those with outcomes measured, the authors note that the vocational education group was no more successful at completing parole than the comparison group.	L13	0	0	-	-	-	-	-	-
Anderson, D. B. (1981). "The relationship between correctional education and parole success." <i>Journal of Offender Counseling, Services, and Rehabilitation</i> 5: 13-25. This matched group study did not provide information on how well the treatment and comparison groups matched on important pre-existing factors.	L13	0	122	116	?	At	-	-	-
Schumacker, R. E., Anderson, D. B., and Anderson, S. L. (1990). "Vocational and academic indicators of parole success." <i>Journal of Correctional Education</i> 4(1): 8-13. This matched group study did not provide information on how well the treatment and comparison groups matched on important pre-existing factors.	L13	0	107	287	1.0	Orc	-	-	-
Lutig, J. T. (1978). "Vocational education in prison—an alternative to recidivism." <i>Journal of Studies in Technical Careers</i> 1(1): 31-42. This matched group study did not provide information on how well the treatment (completers only) and comparison groups matched on important pre-existing factors.	L13	0	96	50	1.0	At	-	-	-
Adult Boot Camps									
Saylor, W. G., Gees, G. (1996). "PREP: A Study of "Rehabilitating" Inmates Through Industrial Work Participation, and Vocational and Apprenticeship Training." Federal Bureau of Prisons: Washington, DC. This is the long-term follow up for the effect of the industrial work participation programs only. Sample selection was controlled with a propensity score variable in the logistic regression.	4	0	3990	3990	10.0	Rei	-0.13	-0.09	.00 S***
Maguire, K. E., Flanagan, T. J., and Thomberry, T. P. (1988). "Prison Labor and Recidivism." <i>Journal of Quantitative Criminology</i> 4(1): 3-18. This research estimated the effect of prison industry employment on post release recidivism among adult male offenders from seven maximum-security facilities in the New York State correctional system. The result reported here is the authors' proportional hazards regression estimate to correct for pre-existing differences in the treatment and control groups.	3	0	399	497	2.0	At	0.02	0.01	.77 NS
Smith, R. P. (2000). Washington State Department of Corrections, personal communication. These are unpublished results by the Washington State Department of Corrections, using a matched comparison group.	3	0	426	414	3.0	Rei	-0.17	-0.08	.01 S**
Canestrini, K. (1993). Follow-up study of industrial training program participants. State of New York Department of Correctional Services. This study did not meet WSIPP's research quality standards to be included in the cost-benefit analysis.	L13	0	305	82600	3.0	Rei	-	-	-
Anderson, S. V. (1985). "Evaluation of the Impact of Participation in Ohio Penal Industries on Recidivism." Ohio Department of Rehabilitation and Correction, Office of Management Information Systems. The results reported here are for the correctional industries group vs. a comparison group. No information was provided on how well the treatment and comparison groups matched on pre-existing variables.	L13	0	744	7839	2.0	Rei	-	-	-
Adult Boot Camps									
Mackenzie, D. L., Brame, R., McDowell, D., Souryal, C. (1995). "Boot camp prisons and recidivism in eight states." <i>Criminology</i> 33(3) 327-357. This is a test of the boot camp in Georgia, comparing the boot group completers (there were relatively few dropouts in this program) vs. the parole and probation (combined) comparison group. The results reported are from the authors' multivariate analysis to control for pre-existing differences. The numbers for the groups were reported in: Mackenzie, D., L., Souryal, C. (1994). Multisite Evaluation of Shock Incarceration, U.S. Department of Justice, September.	3	0	80	183	2.0	Rnc	0.47	0.24	.00 S***
Mackenzie, D. L., Brame, R., McDowell, D., Souryal, C. (1995). "Boot camp prisons and recidivism in eight states." <i>Criminology</i> 33(3) 327-357. This is a test of the boot camp in Illinois, comparing the boot group completers and dropouts (combined) vs. the parolees comparison group. The results reported are from the authors' multivariate analysis to control for pre-existing differences. The numbers for the groups were reported in: Mackenzie, D. L., Souryal, C. (1994). Multisite Evaluation of Shock Incarceration, U.S. Department of Justice, September.	3	0	196	98	1.0	Rnc	-0.15	-0.07	.22 NS

Table IV–K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information			Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)			Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)				
	Design Score N (Prog.)	Follow-up (yrs) N (Comp.)	Crime Outcome Rnc	ES	AdjES	p	Sig	ES	AdjES	p	Sig
Mackenzie, D. L., Brame, R., McDowell, D., Souryal, C. (1995). "Boot camp prisons and recidivism in eight states." Criminology 33(3) 327-357. This is a test of the boot camp in Louisiana, comparing the boot group completers and dropouts (combined) vs. the parolees and probationers (combined) comparison group. The results reported are from the authors' multivariate analysis to control for pre-existing differences. The numbers for the groups were reported in: Mackenzie, D., L., Souryal, C. (1994). Multisite Evaluation of Shock Incarceration, U.S. Department of Justice, September.	3	0	291	251	2.0	Rnc	-0.17	-0.09	.05	S**	-
Mackenzie, D. L., Brame, R., McDowell, D., Souryal, C. (1995). "Boot camp prisons and recidivism in eight states." Criminology 33(3) 327-357. This is a test of the boot camp in New York, comparing the boot group completers and dropouts (combined) vs. the parolees comparison group. The results reported are from the authors' multivariate analysis to control for pre-existing differences. The numbers for the groups were reported in: Mackenzie, D., L., Souryal, C. (1994). Multisite Evaluation of Shock Incarceration, U.S. Department of Justice, September.	3	0	191	95	1.0	Rnc	-0.02	-0.01	.90	NS	-
Mackenzie, D. L., Brame, R., McDowell, D., Souryal, C. (1995). "Boot camp prisons and recidivism in eight states." Criminology 33(3) 327-357. This is a test of the boot camp in Oklahoma, comparing the boot group completers and dropouts (combined) vs. the parolees comparison group. The results reported are from the authors' multivariate analysis to control for pre-existing differences. The numbers for the groups were reported in: Mackenzie, D., L., Souryal, C. (1994). Multisite Evaluation of Shock Incarceration, U.S. Department of Justice, September.	3	0	241	70	2.0	Rev	0.01	0.01	.92	NS	-
Mackenzie, D. L., Brame, R., McDowell, D., Souryal, C. (1995). "Boot camp prisons and recidivism in eight states." Criminology 33(3) 327-357. This is a test of the boot camp in Texas, comparing the "old" boot group completers (there were relatively few dropouts in this program) vs. the probationer comparison group. The results reported are from the authors' multivariate analysis to control for pre-existing differences. The numbers for the groups were reported in: Mackenzie, D., L., Souryal, C. (1994). Multisite Evaluation of Shock Incarceration, U.S. Department of Justice, September.	3	0	330	115	2.0	At	0.03	0.02	.75	NS	-
Mackenzie, D. L., Brame, R., McDowell, D., Souryal, C. (1995). "Boot camp prisons and recidivism in eight states." Criminology 33(3) 327-357. This is a test of the boot camp in South Carolina, comparing the "old" boot group completers (there were relatively few dropouts in this program) vs. the probationer comparison group. The results reported are from the authors' multivariate analysis to control for pre-existing differences. The numbers for the groups were reported in: Mackenzie, D., L., Souryal, C. (1994). Multisite Evaluation of Shock Incarceration, U.S. Department of Justice, September.	3	0	224	115	2.0	At	-0.02	-0.01	.87	NS	-
Mackenzie, D. L., Brame, R., McDowell, D., Souryal, C. (1995). "Boot camp prisons and recidivism in eight states." Criminology 33(3) 327-357. This is a test of the boot camp in South Carolina, comparing the "new" boot group completers (there were relatively few dropouts in this program) vs. the probationer comparison group. The results reported are from the authors' multivariate analysis to control for pre-existing differences. The numbers for the groups were reported in: Mackenzie, D., L., Souryal, C. (1994). Multisite Evaluation of Shock Incarceration, U.S. Department of Justice, September.	3	0	85	69	1.0	Rnc	-0.04	-0.02	.83	NS	-
Brenda, B. B., Toombs, N. J., Whiteside, L. (1996). "Recidivism among boot camp graduates: A comparison of drug offenders to other offenders." Journal of Criminal Justice 24(3): 241-253. This research, of an Arkansas adult boot camp, did not have a comparison group.	13	0	0	0	0.00	0.00	.00	.00	0	-	-
Colorado Department of Corrections. (1993). Colorado regimented inmate training program: A legislative report. This is a boot camp with substance abuse treatment and R&R. Program graduates were compared to a matched group.	3	0	323	823	1.0	Rc	0.02	0.01	.77	NS	-

Multi-Systemic Therapy

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects

	Research Design Information	Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)			Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)									
		Design Score	Researcher Role	N (Prog)	N (Comp)	Follow-up (yrs)	Crime Outcome	ES	AdjES	P	Sig			
Henggeler, S. W., Melton, G. B., and Smith, L. A. (1992). "Family preservation using multisystemic therapy: An effective alternative to incarcerating serious juvenile offenders." <i>Journal of Consulting and Clinical Psychology</i> 60: 953-961. This research reports the results of MST in Simpsonville, SC for serious juvenile offenders. The test is MST versus usual juvenile justice department services.	5	1	43	41	1.2	At	-	-	-0.29	-0.14	.36	NS		
Henggeler, S. W., Melton, G. B., Smith, L. A., Schoenwald, S. K., and Hanley, J. H. (1993). "Family preservation using multisystemic therapy: Long-term follow-up with serious juvenile offenders." <i>Journal of Child and Family Studies</i> 2(4): 283-293. This research reports the updated simple recidivism results of MST in Simpsonville, SC for serious juvenile offenders. The test is MST versus usual juvenile justice department services. Also reported in: Henggeler, S. W., Melton, G. B., & Smith, L. A. (1992). "Family preservation using multisystemic therapy: An effective alternative to incarcerating serious juvenile offenders." <i>Journal of Consulting and Clinical Psychology</i> 60: 953-961.	5	1	43	41	2.4	At	-0.42	-0.21	.06	S*	-	-		
Borduin, C. M., Mann, B. J., Cone, L. T., Henggeler, S. W., Fucci, B. R., Blaske, D. M., and Williams, R. A. (1995). "Multisystemic treatment of serious juvenile offenders: Long-term prevention of criminality and violence." <i>Journal of Consulting and Clinical Psychology</i> 63(4): 569-578. This research reports the results of MST in Columbia, MO for serious juvenile offenders. The test is MST versus individual therapy; the result reported here includes program completers and dropouts in both groups.	5	1	92	84	4.0	At	-0.94	-0.47	.00	S***	-1.39	-0.70	.00	S***
Henggeler, S. W., Melton, G. B., Brondino, M. J., Scherer, D. G., and Hanley, J. H. (1997). "Multisystemic therapy with violent and chronic juvenile offenders and their families: The role of treatment fidelity in successful dissemination." <i>Journal of Consulting and Clinical Psychology</i> 65: 821-833. This research reports the results of a multisite South Carolina study of MST for serious juvenile offenders where quality assurance (adherence to treatment fidelity) was low. The test is MST (low treatment fidelity) versus usual juvenile justice department services.	5	0	82	73	1.7	At	-	-	-	-	-	-	-	
Henggeler, S. W., Pickrel, S. G., and Brondino, M. J. (1999). "Multisystemic treatment of substance abusing and dependent delinquents: Outcomes, treatment fidelity, and transportability." <i>Mental Health Services Research</i> 1(3): 171-184. This research reports the results of MST in Charleston County, SC for juvenile offenders with substance abuse or dependence criteria. The test is MST versus community services.	5	0	58	60	0.9	At	-0.16	-0.16	.37	NS	-0.21	-0.21	.49	NS
Borduin, C. M., Henggeler, S. W., Blaske, D. M., and Stein, R. (1990). "Multisystemic treatment of adolescent sexual offenders." <i>International Journal of Offender Therapy and Comparative Criminology</i> 35: 105-114. This study compares the results of multisystemic therapy vs. individual therapy in an out-patient setting for juvenile sex offenders. The subjects were randomly selected to the treatment groups, but the sample sizes were very small.	4	1	8	8	3.0	At	-1.30	-0.49	.01	S**	-	-	-	
Borduin, C. M., Schaeffer, C. M., and Heilburn, N. (2000). Multisystemic treatment of aggressive and nonaggressive sexual offending in adolescents: Instrumental and ultimate outcomes. Manuscript in preparation. This study compares the results of multisystemic therapy vs. usual services. The subjects were randomly selected to the treatment and control groups.	5	1	24	24	8.0	Ans	-0.67	-0.34	.02	S**	-	-	-	
Henggeler, S. W., Mihalic, S. F., Rone, L., Thomas, C., and Timmons-Mitchell, J. (1998). <i>Blueprints for Violence Prevention, Book Six: Multisystemic Therapy</i> . Boulder, CO: Center for the Study and Prevention of Violence.	-	0	-	-	-	-	-	-	-	-	-	-		
Diversion with Services (vs. Regular Juvenile Court Processing)											-	-		
Severy, Lawrence J. and J. Michael Whitaker. (1982). "Juvenile Diversion: An Experimental Analysis of Effectiveness." <i>Evaluation Review</i> 6(6): 753-774. This study reports the results of a Memphis-area diversion program. The test result reported here is for diversion with services/breaking vs. regular juvenile court processing. Treatment refusers are included in these outcomes.	5	0	775	377	1.0	Cra	-0.02	-0.02	.71	NS	-	-	-	
Dunford, F. W., Osgood, D. W., and Weichselbaum, H. F. (1992). <i>National Evaluation of Diversion Projects, Executive Summary and microfiche</i> , U.S. Department of Justice. Also discussed in: Osgood, D. W. (1983). <i>Offense History and Juvenile Diversion, Evaluation Review</i> , v7, n6: 793-806. This test is for the Midwest (Kansas City) site comparing those placed on diversion (most of whom received services) vs. 'normal formal processing from the juvenile justice system.'	5	0	100	107	1.0	At	-0.02	-0.02	.91	NS	-	-	-	
Dunford, F. W., Osgood, D. W., and Weichselbaum, H. F. (1992). <i>National Evaluation of Diversion Projects, Executive Summary and microfiche</i> , U.S. Department of Justice. Also discussed in: Osgood, D. W. (1983). <i>Offense History and Juvenile Diversion, Evaluation Review</i> , v7, n6: 793-806. This test is for the Upper South (Memphis) site comparing those placed on diversion (most of whom received services) vs. 'normal formal processing from the juvenile justice system.'	5	0	298	329	1.0	At	-0.01	-0.01	.89	NS	-	-	-	

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information		Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)		Difference in the Mean Number of Offenses (of the proportion that Offend or offend)	
	Design Score N (Prog)	Researcher Role N (Comp)	ES	AdjES	p	Sig
Dunford, F. W., Osgood, D. W., and Weichselbaum, H. F. (1982). National Evaluation of Diversion Projects, Executive Summary and microtache, U.S. Department of Justice. Also discussed is the Lower South (Orange County) site comparing those placed on diversion (most of whom received services) vs. "normal formal processing from the juvenile justice system."	5	0	.226	.216	1.0	At
Quay, Herbert C., and Craig T. Love. (1977). "The Effect of a Juvenile Diversion Program on Rearrests." <i>Criminal Justice and Behavior</i> 4: 377-396. This pretrial diversion program emphasized vocational counseling, training, and job placement. The comparison group received regular court processing. The test reported here is for those adjudicated as delinquents. Adjustments were made to standardize the follow up times of the two groups.	5	0	.268	.92	1.2	At
Koch, J. R. (1986). Community services and outright release as alternatives to juvenile court: An experimental evaluation (Doctoral dissertation, Michigan State University, 1985). Dissertation Abstracts International, 46(07), 2081A. (University Microfilms No. 85-20537). This test is police diversion—with community service requirements (of juvenile offenders for relatively minor offenses) vs. traditional processing. The usefulness of the results of this random assignment study are limited by the short follow up period.	3	0	.79	.78	0.3	At
Kelley, T. M., Schuiman, J. L., Lynch, K. (1976). Decentralized intake and diversion: the juvenile court's link to the youth service bureau. <i>Juvenile Justice</i> 27(1): 3-11. This test is diversion with services vs. traditional court processing. The comparison group was made up of those eligible for the diversion but they lived outside of the area for the program, so they entered the regular court process; they matched the treatment group fairly well.	3	0	.75	.75	?	Ct
Stratton, J. G. (1975). Effects of crisis intervention counseling on predelinquent and misdemeanor juvenile offenders. <i>Juvenile Justice</i> 26(4): 7-18. This test is diversion with short-run family crisis intervention services vs. traditional court processing. Random assignment was used, but the follow up period is only 6 months and no information was given on the degree to which randomization matched pre-existing differences.	4	0	.30	.30	0.5	Af
Lipsey, M. W., Cordray, D. S., and Berger, D. E. (1981). "Evaluation of a Juvenile Diversion Program Using Multiple Lines of Evidence." <i>Evaluation Review</i> 5(3): 283-306. This study reports the results of a Los Angeles County Sheriff's Department diversion program. The test reported here is diversion with services vs. regular juvenile court probation, using Lipsey's matched group design.	3	0	.44	.118	0.5	Pc
Regoli, Robert, Wilderman, Elizabeth, and Pogrebin, Mark. 1985. "Using an Alternative Evaluation Measure for Assessing Juvenile Diversion Programs." <i>Children and Youth Services Review</i> 7: 21-38. This study reports the results of Denver-area diversion programs. This combined effect is for the four diversion programs with brokerage and direct services, vs. matched youth not diverted from the court system.	3	0	.102	.102	0.5	Re
Palmer, T., and Lewis, R. V. (1980). <i>An Evaluation of Juvenile Diversion</i> . Cambridge: Oelgeschlager, Gunn & Hain. This project sums the results of 11 diversion projects in California, vs. regular court processing. The Institute made additional adjustments for known pre-existing differences between the diversion and non-diversion groups (i.e., on the number of prior offenses and gender).	3	0	.1345	.1192	0.5	At
Rausch, Sharla. (1983.) "Court Processing Versus Diversion of Status Offenders: A Test of Deterrence and Labeling Theories." <i>Journal of Research in Crime and Delinquency</i> 20: 39-54. This report evaluates the Connecticut Deinstitutionalization of Status Offenders project by comparing a group that received normal court processing and disposition with three groups that received diversion and varying amounts of supervision. The result reported is for the three sites combined.	3	0	.154	.196	0.5	Cra
Sheiden, R. G. 1989. Detention Diversion Advocacy: An Evaluation. Bulletin, Washington, D.C.: U.S. Department of Justice, Office of Justice Programs, Office of Juvenile Justice and Delinquency Prevention, September. This study reports the results of a disposition case advocacy program operating in San Francisco. The result reported here is non-probation based case two groups, and a multivariate analysis, which could have attempted to control for the differences, was either not performed or not reported.	1.3	0	.271	.271	3.0	Jcp
Collingwood, Thomas R., and Robert W. Gentner. (1980). "Skills Training as Treatment for Juvenile Delinquents." <i>Professional Psychology</i> 11:591-158.	1.3	0	.887	.253	?	At

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information	Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)	Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)						
Design Score	Researcher Role	N (Prog)	N (Comp)	Follow-up (yrs)	Crime Outcome	ES	AdjES	p	Sig
Bohnstedt, M. (1978). "Answers to three questions about juvenile diversion." <i>Journal of Research in Crime and Delinquency</i> , January. This research reports the results of eleven California diversion projects. Comparison subjects were those who entered juvenile court the year before the diversion program, but would have been eligible had it existed.	3 0	1362	1143	0.5	At	-0.11	-0.06	.00	S***
Rojek, D. G., Erickson, M. L. (1981). "Reforming the juvenile justice system: the diversion of status offenders." <i>Law & Society Review</i> 16(2): 241-264.	1.3 0	-	-	-	-	-	-	-	-
Pogrebniak, M. R., Poole, P. E., and Regoli, R. M. (1984). "Constructing and implementing a model juvenile diversion program." <i>Youth & Society</i> 15(3): 305-324.	1.3 0	-	-	-	-	-	-	-	-
Frazier, Charles E., and Cochran, John K. (1986). "Official Intervention, Diversion from the Juvenile Justice System, and Dynamics of Human Services Work: Effects of a Reform Goal Based on Labeling Theory." <i>Crime and Delinquency</i> 32(2): 157-176. This study does not examine crime-related outcomes.	- 0	-	-	-	-	-	-	-	-
Klein, M. (1979). "Deinstitutionalization and diversion of juvenile offenders: A litany of impediments." In N. Morris and Tonry, M. (eds.), <i>Crime and Justice: An annual review of research</i> . Chicago: University of Chicago Press, 145-201.	- 0	-	-	-	-	-	-	-	-
Diversion-Simple Release without Services (vs. Regular Court Processing)									
Severy, L. J., and Whitaker, J. M. (1982). "Juvenile Diversion: An Experimental Analysis of Effectiveness." <i>Evaluation Review</i> 6(6): 753-774. This study reports the results of a Memphis-area diversion program. The test reported here is for diversion (simple release without services) vs. regular juvenile court processing. Treatment refusals are included in these outcomes.	5 0	475	377	1.0	Cra	-0.01	-0.01	.90	NS
National Council on Crime and Delinquency, (1987). <i>The Impact of Juvenile Court Intervention</i> . San Francisco: NCCD. This study reports the results of several interventions in the Salt Lake City juvenile court. The test reported here is diversion (notification only, i.e., release without services) vs. routine juvenile court processing.	5 0	124	121	1.0	At	-0.09	-0.09	.49	NS
Davidson, W. S. II, and Redner, R. (1988). "The prevention of juvenile delinquency: Diversion from the juvenile justice system." In R. H. Price, E. L. Cowen, R. P. Lonion, and J. Ramos-Mckay (eds.), <i>14 Ounces of Prevention: A Casebook for Practitioners</i> (pp. 123-137). Washington, D. C.: American Psychological Association. This result is one of the Davidson Phase 4 experiments: release to parents vs. regular juvenile court processing.	5 0	135	124	1.0	Jcp	-0.04	-0.04	.73	NS
Dunford, F. W., Osgood, D. W., and Weichselbaum, H. F. (1982). National Evaluation of Diversion Projects, Executive Summary and microfiche, U.S. Department of Justice. Also discussed in: Osgood, D. W. (1983). Offense History and Juvenile Diversion, <i>Evaluation Review</i> , V7, n6: 793-806. This test is for the Midwest (Memphis) site comparing those "released outright with no services" vs. "normal formal processing from the juvenile justice system."	5 0	95	107	1.0	At	0.03	0.03	.82	NS
Dunford, F. W., Osgood, D. W., and Weichselbaum, H. F. (1982). National Evaluation of Diversion Projects, Executive Summary and microfiche, U.S. Department of Justice. Also discussed in: Osgood, D. W. (1983). Offense History and Juvenile Diversion, <i>Evaluation Review</i> , V7, n6: 793-806. This test is for the Upper South (Memphis) site comparing those "released outright with no services" vs. "normal formal processing from the juvenile justice system."	5 0	344	329	1.0	At	0.00	0.00	.97	NS
Dunford, F. W., Osgood, D. W., and Weichselbaum, H. F. (1982). National Evaluation of Diversion Projects, Executive Summary and microfiche, U.S. Department of Justice. Also discussed in: Osgood, D. W. (1983). Offense History and Juvenile Diversion, <i>Evaluation Review</i> , V7, n6: 793-806. This test is for the Lower South (Orange County) site comparing those "released outright with no services" vs. "normal formal processing from the juvenile justice system."	5 0	216	216	1.0	At	-0.01	-0.01	.90	NS
Diversion with Services (vs. Simple Release without Services)									
Davidson, W. S. II, and Redner, R. (1988). "The prevention of juvenile delinquency: Diversion from the juvenile justice system." In R. H. Price, E. L. Cowen, R. P. Lonion, and J. Ramos-Mckay (eds.), <i>14 Ounces of Prevention: A Casebook for Practitioners</i> (pp. 123-137). Washington, D. C.: American Psychological Association. This result is for Phase 1 of the Davidson's four experiments: behavioral contracting and advocacy vs. simple release.	5 1	49	24	2.0	Jcp	-1.25	-0.62	.00	S***
Severy, L. J., and Whitaker, J. M. (1982). "Juvenile Diversion: An Experimental Analysis of Effectiveness." <i>Evaluation Review</i> 6(6): 753-774. This study reports the results of a Memphis-area diversion program. The result reported here is for diversion with services vs. diversion without services (simple release). Treatment refusals are included in these outcomes.	5 0	755	475	1.0	Cra	-0.02	-0.02	.80	NS

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information			Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)			Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)		
	Design Score	Researcher Role	Follow-up (yrs)	N (Comp)	Crime Outcome	ES	AdjES	p	Sig
Dunford, F. W., Osgood, D. W., and Weichselbaum, H. F. (1982). National Evaluation of Diversion Projects. Executive Summary and microfiche, U.S. Department of Justice. Also discussed in: Osgood, D. W. (1983). Offense History and Juvenile Diversion, Evaluation Review, v7, n6: 793-806. This test is for the Midwest (Kansas City) site comparing those placed on diversion (most of whom received services) vs. those "released outright with no services."	5	0	100	95	1.0 At	-0.05	-0.05	.74	NS
Dunford, F. W., Osgood, D. W., and Weichselbaum, H. F. (1982). National Evaluation of Diversion Projects. Executive Summary and microfiche, U.S. Department of Justice. Also discussed in: Osgood, D. W. (1983). Offense History and Juvenile Diversion, Evaluation Review, v7, n6: 793-806. This test is for the Upper South (Memphis) site comparing those placed on diversion (most of whom received services) vs. those "released outright with no services."	5	0	298	344	1.0 At	-0.01	-0.01	.86	NS
Dunford, F. W., Osgood, D. W., and Weichselbaum, H. F. (1982). National Evaluation of Diversion Projects. Executive Summary and microfiche, U.S. Department of Justice. Also discussed in: Osgood, D. W. (1983). Offense History and Juvenile Diversion, Evaluation Review, v7, n6: 793-806. This test is for the Lower South (Orange County) site comparing those placed on diversion (most of whom received services) vs. those "released outright with no services."	5	0	226	216	1.0 At	0.05	0.05	.60	NS
Alexander, J. F., and Parsons, B. F. (1973). "Short-term behavioral intervention with delinquent families: impact on family process and recidivism." Journal of Abnormal Psychology 81(3): 219-225. The result reported here measures subsequent criminal offenses; FFT group vs. an average rate for the comparison groups. The subjects were mostly juvenile status offenders.	4	1	46	46	1.0 Crc	-0.17	-0.06	.41	NS
Klein, N. C., Alexander, J. F., and Parsons, B. V. (1977). "Impact of family systems intervention on recidivism and sibling delinquency: A model of primary prevention and program evaluation." Journal of Consulting and Clinical Psychology 45: 469-474. This study measured the effects on the siblings of the Alexander & Parsons (1973) study. The result reported here, and the only one in the study, measures court referrals including status offenses. The subjects were mostly juvenile status offenders.	4	1	46	10	2.9 Cra	-0.44	-0.16	.18	NS
Banton, C., Alexander, J. F., Waldron, H., Turner, C. W., and Warburton, J. (1985). "Generalizing treatment effects of functional family therapy: Three replications." American Journal of Family Therapy 13: 16-26. The research reported here is from the "hard core" delinquent study i.e., for serious delinquents who had been incarcerated in a state training school. The test reported here is for FFT vs. a matched group (no significant differences).	3	1	30	44	1.3 At	-0.83	-0.21	.00	S***
Gordon, D., Arbutnott, J., Gustafson, K., and McGreen, O. (1988). "Home-based behavioral-systems family therapy with disadvantaged juvenile delinquents." American Journal of Family Therapy 16: 243-255. This research used a matched group comparison. Based on criminal history, the FFT had a higher risk group than the matched comparisons. The result reported here is felony convictions during the juvenile years.	3	0	27	27	2.5 Cf	-0.67	-0.34	.02	S**
Gordon, D., Graves, K., and Arbutnott, J. (1995). "The effect of functional family therapy for delinquents on adult criminal behavior." Criminal Justice and Behavior 22(1): 60-73. This research used a matched group comparison. Based on criminal history, the FFT had a higher risk group than the matched comparisons. The result reported here is felony convictions during the adult years.	3	0	23	22	5.0 Cf	-0.33	-0.17	.27	NS
Gordon, D. A. (1995). "Functional family therapy for delinquents." In Ross, R. R., Antonowics, D., H., Dhaliwal, G. K., (eds), Going Straight: Effective Delinquency Prevention and Offender Rehabilitation. Ottawa, Ontario: Air Training and Publications, pp 163-178. This trial of FFT was for youth released from a state institution for juvenile offenders. The comparison group was matched for risk of re-offending, age, and social class.	3	0	27	25	1.3 Rei	-0.61	-0.31	.03	S**

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information	Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)	Mean Number of Offenses (of the proportion that Offend or offend)
Multidimensional Treatment Foster Care	Researcher Role Design Score N (Prog) N (Comp)	Crime Outcome Follow-up (yrs) ES AdjES p Sig	ES AdjES p Sig
Hansson, K. (1998). Functional Family Therapy Replication in Sweden: Treatment Outcome with Juvenile Delinquents. Paper presented to the Eighth International Conference on treating addictive behaviors. Santa Fe, NM, February 1998, as reported in: Alexander, J., Barton, C., Gordon, D., Grotzepeter, J., Hansson, K., Harrison, R., Mears, S., Mihalic, S., Parsons, B., Pugh, C., Schulman, S., Waldron, H., and Sexton, T. (1998). Blueprints for Violence Prevention, Book Three: Functional Family Therapy. Boulder, CO: Center for the Study and Prevention of Violence. This is a random assignment evaluation of a FFT test for (mostly) male youth arrested by police in Lund Sweden for serious offenses. Confirming evidence on the random assignment was not reported.	4 0 45 50 2.0 At	-0.64 -0.48 .00 S***	- - - -
Lantz, B. L. (1992). Preventing Adolescent Placement Through Functional Family Therapy and Tracking. Utah Department of Social Services, West Valley Social Services, District 2K, Kearns, UT 84118, Grant #CDP 1070 UT 83-0128020 87-6000-545-W, as reported in: Alexander, J., Barton, C., Gordon, D., Grotzepeter, J., Hansson, K., Harrison, R., Mears, S., Mihalic, S., Parsons, B., Pugh, C., Schulman, S., Waldron, H., and Sexton, T. (1998). Blueprints for Violence Prevention, Book Three: Functional Family Therapy. Boulder, CO: Center for the Study and Prevention of Violence. This was a random assignment evaluation of FFT for adolescents at risk for out-of-home placement due to serious delinquency. The outcome measure is re-enrollment at FFT termination.	1t3 0 22 24 0.2 At	- - - - - -	- - - - - -
Alexander, J., Barton, C., Gordon, D., Grotzepeter, J., Hansson, K., Harrison, R., Mears, S., Mihalic, S., Parsons, B., Pugh, C., Schulman, S., Waldron, H., and Sexton, T. (1998). Blueprints for Violence Prevention, Book Three: Functional Family Therapy. Boulder, CO: Center for the Study and Prevention of Violence.	0 - - - - -	- - - - - -	- - - - - -
Chamberlain, P., and Reid, J. B. (1998). "Comparison of Two Community Alternatives to Incarceration for Chronic Juvenile Offenders." <i>Journal of Consulting and Clinical Psychology</i> 66(4): 624-633. This research reports the results of a study where high-risk chronic juvenile offenders were mandated into out-of-home care by the juvenile court. They were randomly assigned to placement in Group Care (GC) or Multidimensional Treatment Foster Care (MTFC). MTFC parents were trained in the use of behavior management skills and were closely supervised throughout the boy's placement. In both conditions, treatment lasted for an average of seven months.	5 1 37 42 1.0 Crc	-0.83 -0.42 .00 S***	-0.14 -0.07 .57 NS
Chamberlain, P. (1990). "Comparative evaluation of specialized foster care for seriously delinquent youths: A first step." <i>Community Alternatives: International Journal of Family Care</i> 2: 21-36. This research reports the results of a study where juvenile offenders committed to a juvenile corrections institution were diverted to specialized foster care. The matched control group received other residential treatment in the community (e.g. group homes, detention). The groups matched well on pre-existing variables.	3 1 16 16 1.0 Ins	-1.04 -0.26 .01 S***	0.23 0.06 .61 NS
Chamberlain, P., and Mihalic, S. F. (1998). Blueprints for Violence Prevention, Book Eight: Multidimensional Treatment Foster Care. Boulder, CO: Center for the Study and Prevention of Violence.	0 - - - - -	- - - - - -	- - - - - -
Adolescent Diversion Project			
Davidson, W. S. II, and Redner, R. (1988). "The prevention of juvenile delinquency: Diversion from the juvenile justice system." In R. H. Price, E. L. Cowen, R. P. Lonion, and J. Ramos-Mckay (eds.), <i>14 Ounces of Prevention: A Casebook for Practitioners</i> (pp. 123-137). Washington, D. C.: American Psychological Association. This result is for Phase 1 of the Davidson's four experiments: behavioral contracting and advocacy vs. simple release.	5 0 49 24 2.0 Jcp	-1.25 -1.25 .00 S***	- - - -
Davidson, W. S. II, and Redner, R. (1988). "The prevention of juvenile delinquency: Diversion from the juvenile justice system." In R. H. Price, E. L. Cowen, R. P. Lonion, and J. Ramos-Mckay (eds.), <i>14 Ounces of Prevention: A Casebook for Practitioners</i> (pp. 123-137). Washington, D. C.: American Psychological Association. This result is for Phase 2 of the Davidson's four experiments: behavioral contracting and advocacy vs. regular juvenile court processing.	5 1 76 60 2.0 Jcp	-0.47 -0.24 .01 S***	- - - -
Davidson, W. S. II, and Redner, R. (1988). "The prevention of juvenile delinquency: Diversion from the juvenile justice system." In R. H. Price, E. L. Cowen, R. P. Lonion, and J. Ramos-Mckay (eds.), <i>14 Ounces of Prevention: A Casebook for Practitioners</i> (pp. 123-137). Washington, D. C.: American Psychological Association. This result is for Phase 3 of the Davidson's four experiments: behavioral contracting and advocacy vs. regular juvenile court processing.	5 1 99 25 2.0 Jcp	-0.77 -0.38 .00 S***	- - - -

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information			Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)			Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)			
	Design Score	Researcher Role	N (Prog)	N (Comp)	Follow-up (yrs)	Crime Outcome	ES	AdjES	p	Sig
Juvenile Boot Camps										
Peters, M., Thomas, D., and Zamberlan, C. (1997). Boot Camps for Juvenile Offenders, Office of Juvenile Justice and Delinquency Prevention. This is the result for the Cleveland experiment, which placed the most emphasis on treatment. Youth were randomly assigned to the boot camp or regular juvenile justice system processing.	5	0	136	124	1.0	Jcp	-0.28	-0.28	.02	S**
Peters, M., Thomas, D., and Zamberlan, C. (1997). Boot Camps for Juvenile Offenders, Office of Juvenile Justice and Delinquency Prevention. This is the result for the Denver experiment, which placed the most emphasis on discipline and physical requirements. Youth were randomly assigned to the boot camp or regular juvenile justice system processing.	5	0	124	124	2.1	Ct	0.06	0.06	.63	NS
Peters, M., Thomas, D., and Zamberlan, C. (1997). Boot Camps for Juvenile Offenders, Office of Juvenile Justice and Delinquency Prevention. This is the result for the Mobile experiment, which had the most balance between treatment and discipline. Youth were randomly assigned to the boot camp or regular juvenile justice system processing.	5	0	187	187	2.1	Ct	-0.07	-0.07	.52	NS
LEAD: A Boot Camp and Intensive Parole Program. The Final Impact Evaluation, State of California Department of Youth Authority. (1987). This is the California experiment, combining a boot camp with treatment and intensive parole. Youth were randomly assigned to the boot camp or regular juvenile justice system processing.	5	0	313	243	1.0	Af	0.07	0.07	.41	NS
Trulson, C., R., Triplett, R. (1995). "LEAD: A Boot Camp and Intensive Parole Program. The Final Impact Evaluation, State of California Department of Youth Authority." (1997). "School-based juvenile boot camps: evaluating specialized treatment and rehabilitation (STAR)." Journal of Juvenile Justice and Detention Services 14(1): 19-43. This research evaluates a school-based, non-residential boot camp in Texas. The boot camp group was compared to a group of juvenile offenders placed on intensive probation supervision; the groups were matched on age, gender, and race, but the comparison group had a more significant criminal background.	3	0	94	92	1.0	Af	0.36	0.18	.02	S**
Florida Department of Juvenile Justice (1996). Leon County Sheriff's Department Boot Camp: A Follow-Up Study of the First Five Platoons. Prepared by the Bureau of Data and Research, Management Report Number 35. This research is of the boot camp located in Tallahassee, Florida, which provides a traditional boot camp and aftercare services to moderate to high risk youth. The result reported here compares boot camp graduates (63 out of 66 participants graduated) vs. a comparison group matched on age, race, commitment history, prior felony referrals.	3	0	63	63	1.0	At	-0.07	-0.04	.69	NS
Florida Department of Juvenile Justice (1996). Pinellas County Juvenile Boot Camp: A Follow-Up Study of the First Four Platoons. Prepared by the Bureau of Data and Research, Management Report Number 33. This research is of the boot camp located in Clearwater, Florida, which provides a traditional boot camp and aftercare services to moderate to high risk youth. The result reported here compares boot camp graduates (52 out of 57 participants graduated) vs. a comparison group matched on age, race, commitment history, prior felony referrals.	3	0	52	52	1.0	At	0.20	0.10	.32	NS
Florida Department of Juvenile Justice (1997). Polk County Juvenile Boot Camp: A Follow-Up Study of the First Four Platoons. Prepared by the Bureau of Data and Research, Management Report Number 46. This research is of the boot camp located in Bartow, Florida, which provides a traditional boot camp and aftercare services to moderate to high risk youth. The result reported here compares boot camp graduates (64 out of 71 participants graduated) vs. a comparison group matched on age, race, commitment history, prior felony referrals.	3	0	64	64	1.0	At	-0.31	-0.15	.08	S*

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information			Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)			Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)		
	Design Score	Researcher Role	N (Prog)	Follow-up (yrs)	Crime Outcome	ES	AdjES	p	Sig
Florida Department of Juvenile Justice. (1996). Manatee County Sheriff's Department Boot Camp: A Follow-Up Study of the First Seven Platoons. Prepared by the Bureau of Data and Research, Management Report Number 24. This research is of the boot camp located in Bartow, Florida, which provides a traditional boot camp and aftercare services to moderate to high risk youth. The result reported here compares boot camp graduates (58 out of 63 participants graduated) vs. a comparison group matched on age, race, commitment history, prior felony referrals.	3	0	58	1.0	At	.0.19	.0.09	.31	NS
Florida Department of Juvenile Justice. (1997). Bay County Sheriff's Office Juvenile Boot Camp: A Follow-Up Study of the First Seven Platoons. Prepared by the Bureau of Data and Research, Management Report Number 44. This research is of the boot camp located in Panama City, Florida, which provides a traditional boot camp and aftercare services to moderate to high risk youth. The result reported here compares boot camp graduates (59 out of 62 participants graduated) vs. a comparison group matched on age, race, commitment history, prior felony referrals.	3	0	59	1.0	At	.0.14	.0.07	.45	NS
Scared Straight Type Programs									
Michigan Department of Corrections. (1967). A six month follow-up of juvenile delinquents visiting the Ionia Reformatory (Research Report No. 4). Lansing: Michigan Department of Corrections, May. The results reported here are summarized in: Petrosino, A., Turpin-Petrosino, C., & Finckenauer, J. O. (2000). Well-meaning programs can have harmful effects! Lessons from experiments of programs such as Scared Straight, Crime and Delinquency, V 46, N 3: 354-379.	5	0	30	28	0.5	Del	.0.57	.0.3	S**
Greater Egypt Regional Planning & Development Commission. (1979). Menard Correctional Center: Juvenile tours impact study. Carbondale, IL. The results reported here are summarized in: Petrosino, A., Turpin-Petrosino, C., & Finckenauer, J. O. (2000). Well-meaning programs can have harmful effects! Lessons from experiments of programs such as Scared Straight, Crime and Delinquency, V 46, N 3: 354-379.	5	0	94	67	0.8	Pc	.0.14	.0.14	NS
Yarborough, J. C. (1979). Evaluation of JOLT as a deterrence program. Lansing: Michigan Department of Corrections, Program Bureau. The results reported here are summarized in: Petrosino, A., Turpin-Petrosino, C., & Finckenauer, J. O. (2000). Well-meaning programs can have harmful effects! Lessons from experiments of programs such as Scared Straight, Crime and Delinquency, V 46, N 3: 354-379.	5	0	137	90	0.5	Co	.0.04	.0.04	NS
Vreeland, A. D. (1981). Evaluation of Face-to-Face: A juvenile aversion program. Unpublished doctoria dissertation, University of Texas, Dallas. The results reported here are summarized in: Petrosino, A., Turpin-Petrosino, C., & Finckenauer, J. O. (2000). Well-meaning programs can have harmful effects! Lessons from experiments of programs such as Scared Straight, Crime and Delinquency, V 46, N 3: 354-379.	5	0	36	40	0.5	Del	.0.23	.0.23	NS
Finckenauer, J. O. (1982). Scared Straight and the panacea phenomenon. Englewood Cliffs, NJ: Prentice Hall. The results reported here are summarized in: Petrosino, A., Turpin-Petrosino, C., & Finckenauer, J. O. (2000). Well-meaning programs can have harmful effects! Lessons from experiments of programs such as Scared Straight, Crime and Delinquency, V 46, N 3: 354-379.	4	0	46	35	0.5	Del	-	-	-
Lewis, R. V. (1983). Scared straight—California style: Evaluation of the San Quentin Squires program. Criminal Justice and Behavior 10(2), 209-226. The results reported here are also summarized in: Petrosino, A., Turpin-Petrosino, C., & Finckenauer, J. O. (2000). Well-meaning programs can have harmful effects! Lessons from experiments of programs such as Scared Straight, Crime and Delinquency, V 46, N 3: 354-379.	5	0	53	55	1.0	At	.0.32	.0.32	10 NS
Buckner, John C. and Medina Chesney-Lind. (1983.) "Dramatic Cures for Juvenile Crime: An Evaluation of a Prisoner-Run Delinquency Prevention Program." Criminal Justice and Behavior 10(2): 227-247. This is the combined effects for the males and females.	3	0	150	150	1.0	At	-.0.01	-.0.01	NS
Orchowski, S. and Taylor, K. (1981). The insiders juvenile crime prevention program: an assessment of a juvenile awareness program. Richmond: Virginia Department of Corrections. The results reported here are summarized in: Petrosino, A., Turpin-Petrosino, C., & Finckenauer, J. O. (2000). Well-meaning programs can have harmful effects! Lessons from experiments of programs such as Scared Straight, Crime and Delinquency, V 46, N 3: 354-379. The six-month finding was used in the result reported here because of significant attrition problems in the 9- and 12-month follow up results.	5	0	39	41	1.0	Cr	.0.04	.0.04	.86 NS

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information	Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)	Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)
	Design Score N (Prog) N (Comp) Follow-up (yrs) Crime Outcome	ES AdjES p Sig	ES AdjES p Sig
Locke, T. P., Johnson, G. M., Kirigin-ramp, K., Atwater, J. D., Gerrard, M. (1986). An evaluation of a juvenile education program in a state penitentiary. <i>Evaluation Review</i> 10(3): 281-298. The study found no significant results in official court contacts, but the specific results were not reported in the study.	5 0 0 0 .00 .00 .00 .00	-	-
Aggression Replacement Training			
Goldstein, A. P., Glick, B. (1995). "Aggression Replacement Training for Delinquents," in Ross, R.R., Antonowicz, D.H., Dhaliwal, G.K. <i>Going Straight: Effective Delinquency Prevention & Offender Rehabilitation</i> , Ottawa: AIR Training Publications, Chapter 6. This effect was for ART delivered to the youth and his or her family.	3 1 13 32 0.5 At -0.63 -0.16 .07 S*	-	-
Goldstein, A. P., Glick, B. (1995). "Aggression Replacement Training for Delinquents," in Ross, R.R., Antonowicz, D.H., Dhaliwal, G.K. <i>Going Straight: Effective Delinquency Prevention & Offender Rehabilitation</i> , Ottawa: AIR Training Publications, Chapter 6. This effect was for ART delivered to the youth only. The result is for the test with group home youth removed.	3 1 20 32 0.5 At -0.28 -0.07 .32 NS	-	-
Goldstein, A. P., and Glick, B. (1994). The Prosocial Gang: Implementing Aggression Replacement Training. Thousand Oaks, CA: Sage. This effect was for ART delivered to the youth only.	3 1 38 27 0.7 At -0.86 -0.21 .00 S***	-	-
Gibbs, J. C. (1993). "EQUIP: A Peer-Group Treatment Program for Delinquents," in Ross, R.R., Antonowicz, D.H., Dhaliwal, G.K. <i>Going Straight: Effective Delinquency Prevention & Offender Rehabilitation</i> , Ottawa: AIR Training Publications, Chapter 8. This study tested an ART program delivered to juvenile felony offenders in a state institution.	3 0 20 37 1.0 Rev -0.52 -0.26 .07 S*	-	-
Juvenile Court Intensive Probation (as alternative to incarceration)			
Barton, W. H. and Butts, J. A. (1990). "Viable options: intensive supervision programs for juvenile delinquents." <i>Crime and Delinquency</i> 36(2): 238-256. The test is juvenile offenders placed on intensive supervision with services in lieu of commitment to the State.	5 0 326 160 2.0 Cc 0.02 0.02 .85 NS	-	-
Lerman, P. (1975). <i>Community Treatment and Social Control</i> . Chicago: University of Chicago Press. This is Lerman's analysis of the results for California's Community Treatment Project, which tested intensive supervision and treatment as an alternative to regular incarceration.	5 0 241 220 17.2 At 0.09 0.09 .35 NS	-	-
Weibusch, R. G. (1993). "Juvenile intensive supervision: the impact on felony offenders diverted from institutional placement." <i>Crime and Delinquency</i> 39(1): 68-89. The test is juvenile felony offenders placed on intensive supervision with services in lieu of commitment to an institution.	3 0 81 76 1.5 Cf 0.14 -0.07 .38 NS	-	-
Deschenes, E. P., Greenwood, P. (1998). "Alternative placements for juvenile offenders: Results from the evaluation of the Nokomis Challenge Program." <i>The Journal of Research in Crime and Delinquency</i> 35(3): 267-294. The test was an outdoor challenge programming with nine months of intensive community-based aftercare vs. placement in traditional institution. The result reported here is for the last six months of the follow-up period when time at risk was similar.	3 0 75 76 2.0 Af 0.04 0.02 .80 NS	-	-
Wooldredge, J., Hartman, I., Latessa, E., and Holmes, S. (1994). Effectiveness of culturally specific community treatment for African American juvenile felons. <i>Crime and Delinquency</i> 40(4): 589-598. This test is the intensive supervision group with services (substance abuse, family enhancement) vs. regular incarceration group. The result reported uses the authors' logistic regression analysis to control for pre-existing differences.	3 0 160 160 1.5 Crf -0.01 0.00 .94 NS	-	-
Empey, L. T. and Erickson, M. L. (1972). <i>The Provo Experiment: Evaluating community control of delinquency</i> . Lexington, MA: Lexington. This result is the intensive supervision group (with guided group interaction intervention) vs. regular incarceration group, combining the during- and post-treatment periods. The Empey (1972) outcomes reported here are those after adjustment by the findings in: Gottfredson, G. D. (1987). Peer group interventions to reduce the risk of delinquent behavior: A selective review and a new evaluation. <i>Criminology</i> , 25, 611-714.	3 0 37 132 4.8 At -0.73 -0.36 .00 S***	-	-
Juvenile Intensive Parole Supervision (as enhancement to regular parole)			
Greenwood, Peter W., Deschenes, Elizabeth Piper, and John Adams. (1993). "Chronic Juvenile Offenders: Final Results from The Skillman Aftercare Experiment." RAND: Santa Monica. This is the result for the Detroit site, comparing intensive supervision (with few treatment services) vs. regular parole.	5 0 50 49 1.0 At 0.09 0.09 .66 NS	-	-

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information	Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)	Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)
Juvenile Court Intensive Probation (as enhancement to regular probation)	Design Score Researcher Role N (Prog) Follow-up (yrs) Crime Outcome ES AdjES p Sig	ES AdjES p Sig	ES AdjES p Sig
Greenwood, Peter W., Deschenes, Elizabeth Piper, and John Adams. (1993.) "Chronic Juvenile Offenders: Final Results from The Skillman Aftercare Experiment." RAND: Santa Monica. This is the result for the Pittsburgh site, comparing intensive supervision (with few treatment services) vs. regular parole.	5 0 46 41 1.0 At -0.02 -0.02 .93 NS - - - -		
Sontheimer, H., and Goodstein, L. (1983). "Evaluation of juvenile intensive aftercare probation: aftercare versus system response effects." Justice Quarterly 10: 197-227. This study examined the Philadelphia intensive aftercare program. The result reported here is the 9-month outcome to make the follow-up time equivalent between the treatment and randomly assigned control group.	5 0 28 33 0.8 At -0.27 -0.27 .28 NS - - - -		
Fagan, Jeffrey A. (1990). "Treatment and Reintegration of Violent Juvenile Offenders: Experimental Results." Justice Quarterly 7(2): 233-263. The effect shown here (the combined results of the program's sites-Boston, Detroit, Memphis, and Newark), is intensive supervision with treatment vs. mainstream juvenile corrections programs.	4 0 39 37 1.5 Af -0.15 -0.11 .52 NS 0.21 0.00 .60 NS		
Sealock, Miriam D., Gottfredson, Denise C., and Gallagher, Catherine A. (1997). "Drug Treatment for Juvenile Offenders: Some Good and Bad News." Journal of Research in Crime and Delinquency 34(2): 210-236. Both groups received intensive institution drug treatment; this test compares the aftercare group (with transitional and community-based intensive services) vs. the no aftercare group. The result reported here is from the authors regression analyses to adjust for pre-existing differences in the treatment and comparison groups.	3 0 120 131 1.5 Ct 0.17 0.08 .19 NS - - - -		
Troia, N. (1994). An evaluation of the intensive aftercare pilot program (final report). Madison: Wisconsin Department of Health and Social Services. This result is for juvenile offenders (completers and non completers) from counties with an intensive aftercare program vs. those released to 65 other Wisconsin counties without the program (the aggregate recidivism rates for the two groups of counties were similar before the IAP program).	3 0 105 606 1.0 Rei -0.01 0.00 .96 NS - - - -		
Josi, D. A., and Sechrist, D. K. (1999). "A pragmatic approach to parole aftercare: Evaluation of a community reintegration program for high-risk youthful offenders." Justice Quarterly 16(1): 51-80. This effect compared those receiving intensive aftercare with Lifeskills training vs. those without the aftercare program.	3 0 106 115 1.0 At -0.44 -0.22 .00 S*** - - - -		
Empey, L. T. and Erickson, M. L. (1972). The Provo experiment: Evaluating community control of delinquency. Lexington, MA: Lexington. This result is the intensive supervision group (with guided group interaction intervention) vs. regular probation group, combining the during- and post-treatment periods. The Empey (1972) outcomes reported here are those after adjustment by the findings in: Gottfredson, G. D. (1987). Peer group interventions to reduce the risk of delinquent behavior: A selective review and a new evaluation. Criminology, 25, 671-714.	5 0 62 69 4.8 At -0.33 -0.33 .07 S* 0.00 0.00 .00 S***		
Eirod, H. Preston and Minor, Kevin. (1992). "Second Wave Evaluation of a Multi-Faceted Intervention for Juvenile Court Probationers." International Journal of Offender Therapy and Comparative Criminology, 36(3): 247-262. Intensive supervision and services (3-day wilderness experience, social skills training, parent skills training) vs. standard probation.	5 0 55 53 1.5 Crc 0.03 0.03 .92 NS - - - -		
Land, K. C., McCall, P. L., and Williams, J. R. (1992). "Intensive Supervision of Status Offenders: Evidence on Continuity of Treatment Effects for Juveniles and a 'Hawthorne Effect' for Counselors." In McCord, J. and Tremblay, R. E. (eds.), Preventing Antisocial Behavior: Interventions from Birth through Adolescence, (New York: Guilford Press), Chapter 15. Results also reported in: Land, Kenneth C. and McCall, Patricia L. (1994). "Logistic versus hazards regression analyses in evaluation research, an exposition and application to the North Carolina Court Counselors' Intensive Protective Supervision Project," Evaluation Review 18(4): 411. Intensive supervision with services for status offenders (youths referred to the courts for runaway, truant, or ungovernable behaviors) vs. regular court processing. The results reported here combine the "early" and "late" periods of the evaluation.	5 0 213 101 3.0 At 0.01 0.01 .93 NS - - - -		
Fagan, J., and Reinerman, C. (1991). "The Social Context of Intensive Supervision: Organizational and Ecological Influences on Community Treatment," pp 341-354 in Armstrong, Troy L. (ed.), Intensive Interventions with High Risk Youth, (1991) New York: Willow Tree Press. The main treatment difference was the greater frequency of contact for the intensive vs. regular probation supervision. The result reported here is for the "E1" group (which did not have the implementation problems the "E2" experienced) vs. the randomly assigned control group, based on an average of the author's simple recidivism rates and his survival analysis.			

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information			Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)			Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)		
	Design Score	N (Prog)	N (Comp)	Follow-up (yrs)	Crime Outcome	ES	AdjES	p	Sig
National Council on Crime and Delinquency. (1987). <i>The Impact of Juvenile Court Intervention</i> . San Francisco: NCCD. This is intensive probation with services vs. routine probation.	5	0	134	121	1.0	.At	0.02	.02	.90 NS
Metametrics, Inc. (1984). <i>Evaluation of the Breakthrough Foundation Youth at Risk Program: The 10-day Course and Follow-up Program</i> . Intensive supervision and services (10-day wilderness experience, coordinated community follow-up resources) vs. standard probation.	3	0	26	26	1.0	.At	-0.65	-0.33	.02 S**
Gilbert, G., Ronald. (1977). "Alternate Routes: A Diversion Project in the Juvenile Justice System." <i>Evaluation Quarterly</i> 1(1): 301-317.	Lt3	0	58	78	1.0	.At	-	-	-
Sametz, Lynn and Donna Hanparian. (1969). "Innovative Programs in Cuyahoga County Juvenile Court: Intensive Probation Supervision and Probation Classification." Ohio Serious Juvenile Offender Project. Cleveland, Ohio.	Lt3	0	127	23	1.5	.Cr	-	-	-
Juvenile Sex Offender Treatment—Primarily Cognitive-Behavioral									
Borduin, C. M., Schaeffer, C. M., and Heilblum, N. (2000). Multisystemic treatment of aggressive and nonaggressive sexual offending in adolescents: Instrumental and ultimate outcomes. Manuscript in preparation.	5	1	24	24	8.0	.As	-0.67	-0.67	.02 S**
Borduin, C. M., Schaeffer, C. M., and Heilblum, N. (2000). Multisystemic treatment of aggressive and nonaggressive sexual offending in adolescents: Instrumental and ultimate outcomes. Manuscript in preparation. This study compares the results of multisystemic therapy vs. usual services for juvenile sex offenders. The subjects were randomly selected to the treatment and control groups.	5	1	24	24	8.0	.Ans	-0.67	-0.34	.02 S**
Borduin, C. M., Henggeler, S. W., Blaske, D. M., and Stein, R. (1990). Multisystemic treatment of adolescent sexual offenders. <i>International Journal of Offender Therapy and Comparative Criminology</i> 35: 105-114. This study compares the results of multisystemic therapy vs. individual setting for juvenile sex offenders. The subjects were randomly selected to the treatment and control groups.	4	1	8	8	3.0	.As	-1.30	-0.97	.01 S**
Borduin, C. M., Henggeler, S. W., Blaske, D. M., and Stein, R. (1990). Multisystemic treatment of adolescent sexual offenders. <i>International Journal of Offender Therapy and Comparative Criminology</i> 35: 105-114.	4	0	8	8	3.0	.Ans	-	-	-
Lab, Steven P., Shields, Glenn, Schondel, Connie. (1993). "Research note: An evaluation of juvenile court based sexual offender treatment." <i>Crime and Delinquency</i> 39(4): 543-553. This study reports the results of a juvenile court based sexual offender treatment program employing cognitive-behavioral techniques as well as family and group therapy. The comparison group was matched well on all key variables.	3	0	46	109	? Crs	-0.09	-0.04	.63	NS
Worling, J. R., and Curwen, T. (2000). "Adolescent sexual offender recidivism: Success of specialized treatment and implications for risk prediction." <i>Child Abuse and Neglect</i> 24(7): 965-982. This study reports the results of a juvenile sex offender program which uses a family-involved intervention with cognitive-behavioral treatment. The results reported here for the treatment group combine those completing treatment and the treatment dropouts.	3	0	85	46	6.2	Ccs	-0.04	-0.02	.83 NS
Worling, J. R., and Curwen, T. (2000). "Adolescent sexual offender recidivism: Success of specialized treatment and implications for risk prediction." <i>Child Abuse and Neglect</i> 24(7): 965-982. This study reports the results of a juvenile sex offender program which uses a family-involved intervention with cognitive-behavioral treatment. The results reported here for the treatment group combine those completing treatment and the treatment dropouts.	3	0	85	46	6.2	Cc	-0.40	-0.20	.03 S**
Guaino-Ghezzi, G. S., and Kimball, L. M. (1998). "Juvenile sex offenders in treatment." <i>Corrections Management Quarterly</i> 2: 45-54. This study reports the results of a specialized sex-offender treatment program for assaultive male offenders comparing program completers vs. completers of a non-specialized treatment program, with only a one-year follow up. The report notes that the groups matched well on pre-existing variables.	3	0	33	25	1.0	.Ans	-0.40	-0.20	.25 NS

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information			Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)			Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)			
	Design Score	Researcher Role	N (Prog)	N (Comp)	Follow-up (yrs)	Crime Outcome	ES	AdjES	p	Sig
Guarino-Ghezzi, G. S. and Kimball, L. M. (1998). "Juvenile sex offenders in treatment." Corrections Management Quarterly 2: 45-54. This study reports the results of a specialized sex-offender treatment program for assaultive male offenders comparing program completers vs. non-completers of a non-specialized treatment program, with only a one-year follow up. The report notes that the groups matched well on pre-existing variables.	3	0	33	25	1.0	Ar	-0.36	-0.18	.17	NS
Bremer, J. F. (1992). "Serious juvenile sex offenders: treatment and Long-term follow-up." <i>Psychiatric Annals</i> 22(6): 326-332. This research had no comparison group and was not a comparative evaluation of program outcomes.	Lt3	0	-	-	-	-	-	-	-	-
Wilderness Programs										
Winterdyk, J. and Roesch, R. (1982). "A wilderness experiential program as an alternative for probationers: An evaluation." Canadian Journal of Criminology 24: 39-49.	5	0	30	30	0.4	Ct	0.00	0.00	1.0	NS
Eirod, H. Preston and Minor, Kevin. (1992.) "Second Wave Evaluation of a Multi-Faceted Intervention for Juvenile Court Probationers." International Journal of Offender Therapy and Comparative Criminology 36(3): 247-262. Intensive supervision and services (3-day wilderness experience, social skills training, parent skills training) vs. standard probation.	5	0	22	21	2.0	Orc	0.03	0.03	.92	NS
Greenwood, P. W. and Turner, S. (1987)."The VisionQuest Program: an evaluation." RAND R-3445-QJDP. This research examined San Diego's VisionQuest program, an extensive privately-run long-run wilderness program. The result reported here combine the authors' logistic regression results for program graduates with program dropouts, vs. the California Youth Authority comparison group.	3	0	122	177	1.0	Af	-0.25	-0.12	.04	S**
Deschenes, E. P. and Greenwood, P. (1988). "Alternative placements for juvenile offenders: Results from the evaluation of the Nokomis Challenge Program." The Journal of Research in Crime and Delinquency, 35(3): 267-294. The test was an outdoor challenge programming with nine months of intensive community-based aftercare vs. placement in traditional institution. The result reported here is for the last six months of the follow-up period when time at risk was similar.	3	0	75	76	2.0	Af	0.04	0.00	.80	NS
Troia, Nina. (1991.) "An Evaluation of the SPRITE Program." Madison, WI: Department of Health and Social Services.	Lt3	0	171	1837	0.5	Rei	-0.05	0.00	.50	NS
Roberts, Albert R., Camasso, D. S. W., and Michael J. Camasso. (1991). Juvenile Offender Treatment Programs and Cost-Benefit Analysis. Juvenile and Family Court Journal, 37-47.	3	0	60	60	0.0	Ct	-0.47	0.00	.01	S***
Weeks, S. Z. (1995). The effects of Sierra II, an adventure probation program, upon selected behavioral variables of adolescent juvenile delinquents. University of Virginia, UMI Dissertation Services. This groups in this study had uncontrolled pre-existing differences, small numbers, and a short follow up.	Lt3	0	18	18	0.5	Ca	-0.54	0.00	.11	NS
Other Family-Based Therapy Approaches										
McPherson, S. J., McDonald, L. E., and Rver, C. W. (1993). "Intensive counseling with families of juvenile offenders." Juvenile and Family Court Journal 34: 27-33. This probation program uses many "Functional Family Therapy-like" counseling approaches. The comparison group was randomly assigned to regular juvenile court programs which, in this county, employed fairly extensive therapeutic approaches.	5	1	15	60	0.6	Crc	-0.50	-0.25	.08	S*
Howitt, P. S. and Moore, E. A. (1991)."Efficacy of intensive early intervention: An evaluation of the Oakland County Probate Court Early Offender Program." Juvenile and Family Court Journal 42: 25-34. This probation program uses many "MST-like" counseling approaches. The comparison group was a sample of youth who would have been eligible in the five years before the program went into effect; the two groups were found to match on many variables.	3	1	24	58	3.0	Ct	-0.71	-0.18	.00	S***
Baron, R., Feeney, F., Thornton, W. (1973). "Preventing delinquency through diversion: The Sacramento County 601 diversion project." Federal Probation 37(1): 13-18. This program diverted juveniles with status offenses with a short-term family crisis therapy. The outcome measure reported here is criminal re-offenses.	4	0	803	558	0.6	Crc	-0.21	-0.15	.00	S***

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

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	Design Score	N (Prog)	N (Comp)	Follow-up (yrs)	Crime Outcome	ES	AdjES	p	Sig
Baron, R., Feeney, F. (1976). Conference on family counseling and juvenile diversion (LEAA Grant No. 74TN-99-001). Davis: University of California Center on Administration of Criminal Justice. These results were reported in: McPherson, S. J. (1981). Family counseling for youthful offenders in the juvenile court setting: A therapy outcome study (Doctoral dissertation, University of Oregon, 1980). Dissertation Abstracts International, 42(01), 382B. (University Microfilms No. 81-09550). This program diverted juveniles with criminal offenses with a short-term family crisis therapy. The outcome measure reported here is criminal re-offenses.	4	0	982	211	0.6	Crc	-0.45	-0.34	.00 S***
Johnson, T. F. (1977). "The results of family therapy with juvenile offenders." <i>Juvenile Justice</i> 29(November): 33. This research tests a program using a family-based intervention vs. regular juvenile court probation.	3	0	190	190	2.0	Jcp	-0.24	-0.12	.02 S**
Byles, J. A., and Maurice, A. (1979). "The juvenile services project: An experiment in delinquency control." <i>Canadian Journal of Criminology</i> 21: 257-262. This is an evaluation of the Juvenile Services project which employed family-oriented therapy. Random assignment was used but pre-existing difference were found and not controlled in subsequent analyses.	3	0	154	151	2.0	Pc	0.15	0.07	.19 NS
Structured Restitution for Juvenile Offenders (vs regular court programming)									
Schneider, Anne L. (1990). <i>Deterrance and Juvenile Crime: Results from a National Policy Experiment</i> . New York: Springer-Verlag. This research reports the results of several accountability-oriented restitution programs for juveniles on probation. This result is for the program in Boise and compares the restitution group vs. those sentenced to several successive weekends of detention in a local facility.	5	0	41	64	2.0	Cr	-0.04	-0.04	.84 NS
Schneider, Anne L. (1990). <i>Deterrence and Juvenile Crime: Results from a National Policy Experiment</i> . New York: Springer-Verlag. This research reports the results of several accountability-oriented restitution programs for juveniles on probation. This result is for the program in Washington, DC, and compares victim-offender mediation restitution for a group of serious offenders.	3	0	48	68	2.0	Cr	-0.20	-0.10	.28 NS
Schneider, Anne L. (1990). <i>Deterrence and Juvenile Crime: Results from a National Policy Experiment</i> . New York: Springer-Verlag. This research reports the results of several accountability-oriented restitution programs for juveniles on probation. This result is for the program in Clayton County, Georgia where different restitution strategies were compared with traditional probation programs.	5	0	105	71	2.0	Cr	-0.06	-0.06	.69 NS
Schneider, Anne L. (1990). <i>Deterrence and Juvenile Crime: Results from a National Policy Experiment</i> . New York: Springer-Verlag. This research reports the results of several accountability-oriented restitution programs for juveniles on probation. This result is for the program in Oklahoma County, where different restitution strategies were compared with traditional probation programs.	5	0	69	32	2.0	Cr	-0.04	-0.04	.85 NS
Schneider, Anne L. (1990). <i>Deterrence and Juvenile Crime: Results from a National Policy Experiment</i> . New York: Springer-Verlag. This research reports the results of several accountability-oriented restitution programs for juveniles on probation. This result is for the program in Ventura, CA where there were many problems implementing the random assignment evaluation design. The test is most similar to that of Dane County, WI where the experimental restitution program was compared to "ad-hoc" (i.e. less structured) restitution practices.	3	0	58	16	2.0	Cr	0.07	0.04	.80 NS
Schneider, Anne L. (1990). <i>Deterrence and Juvenile Crime: Results from a National Policy Experiment</i> . New York: Springer-Verlag. This research reports the results of several accountability-oriented restitution programs for juveniles on probation. This result is for the program in Dane County, WI where the experimental restitution program was compared to "ad-hoc" (i.e. less structured) restitution practices.	5	0	45	49	2.0	Cr	-0.69	-0.69	.00 0.00 .00 0
Smiciklas, D., and Binder, A. (1982). "Community restitution for juveniles: An approach and preliminary evaluation." <i>Criminal Justice Review</i> 7: 46-50. Coordinated Services	Lt3	0	60	60	0.6	At	-0.27	0.00	.14 NS 0.00 0.00 .00 0

Notes to Information Listed: The "Design Score" is a measure of the overall level of confidence that can be placed in the findings based on how the evaluation was designed—a "5" is the highest score, "1" is the lowest. "Researcher Role" is whether the program was carried out by the developer (1) or whether it was a "real world" program (0). "N(Prog)" and "N(Comp)" are the numbers in the treatment and comparison groups. "Follow-up (yrs)" is the the follow up time in years. "Crime Outcome" is a code for the type of recidivism measure used in the study. "ES" is the mean difference effect size approximated from proportion data (dichotomous group recidivism rates) using the arcsine transformation and adjusted using the Hedges correction for small sample sizes as described in Lipsey & Wilson (2000). "AdjES" is the institute-adjusted effect size; p is the significance level; and "Sig" indicates significance levels (NS=p=.10; S**=p>.05; S***=p<.01).

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information			Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)			Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)			
	Design Score	Researcher Role	N (Prog)	N (Comp)	Follow-up (yrs)	Crime Outcome	ES	AdjES	p	Sig
California State Board of Corrections (1999). Repeat Offender Prevention Project Status Report, < http://www.bdotr.ca.gov/cpdp/rop/reportable_contents.htm >. These are the 1999 early results for California's multi-site Repeat Offender Prevention Program which uses multidisciplinary case management and integrated service delivery for juvenile offenders at high risk of repeat offending.	4	0	63	44	0.5	N/A	0.05	0.04	.79	NS
County of Orange Probation Department (1989). Preliminary results for evaluating the 8% early intervention program, < http://www.oc.ca.gov/Probation/88%Solution/8%InterventionProgram.asp >. These are the early results for Orange County's 8% Program which uses multidisciplinary case management and integrated service delivery for juvenile offenders at high risk of repeat offending.	4	0	53	53	0.5	Jcp	-0.16	-0.12	.41	NS
Ezell, Mark. (1997). Teamchild: Evaluation of the Second Year, Unpublished Manuscript. This program provides legal (civil) and community advocacy services to juvenile offenders.	3	0	32	32	0.5	Ct	-0.19	-0.10	.43	NS
Toian, Patrick, Perry, H., Shelley, M., and Jones, Theodore. (1987). "Delinquency Prevention: An Example of Consultation in Rural Community Mental Health." <i>Journal of Community Psychology</i> 15: 43-50. In a rural setting, the intervention focused on improving how local agencies coordinate service delivery to first-time offenders. The program group was contrasted to a matched prior comparison group.	3	0	55	177	0.6	Ca	-0.56	-0.28	.00	S***
Other Juvenile Institutional-Based Treatments										
Adams, Reed and Harold J. Vetter. (1982). Social Structure and Psychodrama Outcome: A Ten-year Follow-up. <i>Journal of Offender Counseling, Services, and Rehabilitation</i> 6: 11-19. The treatment was the use of a psychodrama therapy program.	5	0	14	13	10.0	Af	1.14	1.14	.02	S**
Guerra, N. G. and Slaby, R. G. (1990). Cognitive mediators of aggression in adolescent offenders: 2. Intervention. <i>Developmental Psychology</i> 26: 269-277. The program was a 12-session cognitive mediation training program teaching social problem-solving skills. The result reported is the program group vs. no treatment control group.	4	0	29	24	2.0	Rev	-0.24	-0.18	.37	NS
Shivratan, J. L. (1988). "Social interactional training and incarcerated juvenile delinquents." <i>Canadian Journal of Criminology</i> 30: 145-163. This is a test of institutionalized juveniles given social interactional training vs. a no-treatment control group.	5	1	13	15	1.1	Ct	-0.42	-0.21	.26	NS
Shivratan, J. L. (1988). "Social interactional training and incarcerated juvenile delinquents." <i>Canadian Journal of Criminology</i> 30: 145-163. This is a test of institutionalized juveniles given stress management training vs. a no-treatment control group.	5	1	14	15	1.1	Ct	-0.06	-0.03	.88	NS
Sealock, Miriam D., Gottfredson, Denise C., and Gallagher, Catherine A. (1997). "Drug Treatment for Juvenile Offenders: Some Good and Bad News." <i>Journal of Research in Crime and Delinquency</i> 34(2): 210-236. This test compares youth assigned (by a judge) to a residential program that included drug treatment vs. those assigned to probation. The result reported here is from the authors' regression analyses to adjust for pre-existing differences in the treatment and comparison groups.	3	0	298	222	1.5	Ct	0.04	0.02	.67	NS
Springfield, Nolan. (1977.) "The Impact of Family Counselling in Resocializn A Offenders Within a Positive Peer Treatment Milieu." <i>Offender Rehabilitation</i> 1:349-360. The treatment was family counseling and guided group interaction, versus guided group interaction alone.	3	1	20	32	1.0	Rei	-0.64	-0.16	.03	S**
Hagan, M. P., Cho, M. E., Jensen, J. A., and King, R. P. (1997). "An assessment of the effectiveness of an intensive treatment program for severely mentally disturbed juvenile offenders." <i>International Journal of Offender Therapy and Comparative Criminology</i> 41(4): 340-350. This study did not meet WSIPP's research quality standards.	Lt3	0	26	27	5.0	Cf	-	-	-	-
Jessness, Carl F. (1975.) 'Comparative Effectiveness of Behavior Modification and Transactional Analysis Programs for Delinquents.' <i>Journal of Consulting and Clinical Psychology</i> 43(6): 758-779. This evaluation compared the effectiveness of behavior modification and transactional analysis in the rehabilitation of institutionalized delinquents. The result is for the Holton Close school.	3	0	479	660	1.0	V	-0.31	-0.16	.00	S***
Jessness, Carl F. (1975.) 'Comparative Effectiveness of Behavior Modification and Transactional Analysis Programs for Delinquents.' <i>Journal of Consulting and Clinical Psychology</i> 43(6): 758-779. This evaluation compared the effectiveness of behavior modification and transactional analysis in the rehabilitation of institutionalized delinquents. The result is for the Holton Close school.	3	0	415	499	1.0	V	-0.20	-0.10	.00	-

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information			Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)			Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)		
	Design Score	N (Prog)	N (Comp)	Crime Outcome Follow-up (yrs)	ES	AdjES	p	Sig	
National Job Corps									
Schochet, P. Z., Burghardt, J., and Glazerman, S. (2000). National Job Corps Study: The Short-Term Impacts of Job Corps on Participants' Employment and Related Outcomes. Washington D.C.: U.S. Department of Labor.	5	0	2858	1905	2.5	Sa	-	-	-
Schochet, P. Z., Burghardt, J., and Glazerman, S. (2000). National Job Corps Study: The Short-Term Impacts of Job Corps on Participants' Employment and Related Outcomes. Washington D.C.: U.S. Department of Labor. The Job Corps program provides intensive academic classroom instruction and vocational skills training for an extended period (about eight months on average) serving primarily students without a high school credential. The result reported here is for 16-17 year olds.	5	0	2858	1905	2.5	Sc	-0.08	-0.08	.01 S***
Job Training Partnership Act									
Bloom, H., Orr, L. O., Cave, G., Bell, S. H., Doolittle, F., and Lin, W. (1994). The National JTPA Study: Overview; Impacts, Benefits and Costs of Title II-A. Cambridge, Massachusetts: Abt Associates Inc. Program services include an assessment of an unemployed individual's needs and abilities and a strategy of services such as classroom training, on-the-job training, job-search assistance, work experience, counseling, basic skills training and support services. The test here is for youth in JTPA, a portion of whom reported prior arrests.	5	0	1373	685.65	3.0	Sa	0.10	0.00	.03 S*
Alternative Residential Settings (Group Homes) vs. Traditional Juvenile Institutions									
Empey, L. T. and Lubeck, S. G. (1971). The Silverlake experiment: Testing delinquency theory and community intervention. Chicago: Aldine. The research compared community residential units (using guided group interaction therapy) vs. traditional juvenile institutions.	4	0	140	121	1.0	At	-0.08	0.00	.53 NS
Fendrich, Michael and Melanie Archer. (1998.) "Long-term Rearrests: A Sample of Adjudicated Delinquents; Evaluating the Impact of Alternative Programs." <i>The Prison Journal</i> 78(4): 360-89. "Treatment" is a group of alternative treatments that are alternatives to training school placements. Among the programs considered are halfway houses, residential treatment programs, foster homes, group homes, camping programs, and vocational training programs.	3	0	102	164	12.0	At	-0.25	-0.12	.05 S**
Greenwood, P. W. and Turner, S. (1993). "Evaluation of the Paint Creek center: a residential program for serious delinquents." <i>Criminology</i> 31(2): 263-279. Institutionalized juvenile offenders were randomly assigned to a comprehensive and highly structured array of intervention services vs. traditional juvenile training school.	5	0	73	75	1.0	At	-0.21	-0.21	.19 NS
Gottfredson, D. and Barton, W. H. (1993). "Deinstitutionalization of juvenile offenders." <i>Criminology</i> 31: 591-611.	3	0	318	254	2.5	At	-	-	-
Early Childhood Education and Therapeutic Child Care for Disadvantaged Youth									
Pagan, Linda, Tremblay, Richard E., Vitato, Frank, and Parent, Sophie. (1998). "Does preschool help prevent delinquency in boys with a history of perinatal complications?" <i>Criminology</i> 36(2): 245-267. This measure is for the impact of the preschool program on the serious delinquency rates of all of those in the preschool (those with- and without perinatal complications) vs. those not attending the preschool.	3	0	117	287	8.0	Ssd	-0.19	-0.09	.09 S*

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information	Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)	Difference in the Mean Number of Offenses (of the proportion that Offend or offend)
School-Interventions	Design Score N (Prog) N (Comp) Follow-up (yrs) Crime Outcome	ES AdjES p Sig	ES AdjES p Sig
Schweinhart, L. J., Barnes, H. V., and Weikart, D. P. (1993). Significant Benefits: The High/Scope Perry Preschool Study through age 27. Ypsilanti, MI: High/Scope Press.	5 1 58 65 23.0 At -0.25 -0.13 .16 NS -0.41 -0.20 .08 S*		
Reynolds, A. J., Temple, J. A., Robertson, D. L., and Mann, E. A. (2000). Long-Term Benefits of Participation in the Title 1 Chicago Child-Parent Centers. Paper presented at the Biennial Meeting of the Society for Research on Adolescence, March 30. The Chicago Child-Parent Center Program is a center-based intervention providing comprehensive educational and family-support services to economically disadvantaged children from pre-school to early elementary school. The matched comparison group participated in alternative government-funded childhood program (a full-day kindergarten program). The results reported here are from the author's multivariate analysis to control for any pre-existing differences.	3 0 989 550 14.0 Jcp -0.23 -0.12 .00 S** - - -		
Lally, J., Ronald, Mangione, Peter L., Honig, Alice S. (1987). The Syracuse University Family Development Research Program, Long-Range Impact of an Early Intervention with Low-Income Children & Their Families. San Francisco: Far West Laboratory for Educational Research and Development. The Syracuse Family Development Research Program (FDRP) was a five-year program in the early 1970s for low income, mostly single parent, families, providing pre-natal care, weekly home visits, parent training, child care, and nutrition. The matched comparison group was selected three years after the start of the program.	3 1 65 54 13.0 Ct -0.54 -0.13 .01 S*** -0.50 -0.13 .76 NS		
Moore, E., Arnsden, G., and Gogerty, P. (1998). A twelve-year follow-up study of maltreated and at-risk children who received early therapeutic child care. <i>Child Maltreatment</i> 3(1): 3-16. This intervention is for abused or neglected children and addresses parent, child, and family risk factors. Parents as well as siblings of target children receive services.	4 1 27 21 12.0 At -0.26 -0.10 .37 NS - - -		
Children At Risk Program			
Harell, A., Cavanagh, S., and Sridharan S. (1999). Evaluation of the Children at Risk Program: Results 1 Year After the End of the Program. <i>Research in Brief</i> ; Washington D.C.: National Institute of Justice, November 1999. According to NIJ, "The evaluation of the Children at Risk (CAR) drug and delinquency prevention program for high-risk adolescents 11 to 13 years of age living in narrowly defined, severely distressed neighborhoods in Austin, Texas; Bridgeport, Connecticut; Memphis, Tennessee; Savannah, Georgia; and Seattle, Washington....Case managers collaborated closely with staff from criminal justice agencies, schools, and other community organizations to provide comprehensive, individualized services that targeted neighborhood, peer group, family, and individual risk factors."	3 0 264 236 1.0 Orc -0.14 -0.07 .12 NS - - -		
Nurse Home Visitation			
Olds, David L., Henderson, Jr., Charles R., Cole, Robert, Eckenrode, John, et al. (1998). "Long-term effects of nurse home visitation on children's criminal and antisocial behavior: 15-year follow-up of a randomized controlled trial." <i>JAMA: Journal of the American Medical Association</i> , 280(14). This result reported here is for the 15-year-old children of unmarried higher risk women.	5 1 38 62 15.0 Sa - - - - -0.45 -0.23 .03 S**		
Olds, David L., Eckenrode, John, et al. (1997). "Long-term effects of home visitation on maternal life course and child abuse and neglect." <i>JAMA: Journal of the American Medical Association</i> 278(8): 637. This result reported here is for the unmarried, higher risk women.	5 1 38 62 15.0 Ct - - - - -0.70 -0.35 .00 S***		
Olds, D., Hill, P., Mihalic, S., and O'Brien, R. (1998). Blueprints for Violence Prevention, Book Seven: Prenatal and Infancy Home Visitation by Nurses. Boulder, CO: Center for the Study and Prevention of Violence. This Blueprint report describes the Nurse Home Visitation program and the evaluations of it.	- 0 - - - 0.00 - - 0.00 0.00 .00 0		
Seattle Social Development Project			
Hawkins, J. David, Catalano, Richard F., Kosterman, Rick, Abbott, Robert, Hill, Karl (1999). "Preventing Adolescent Health-Risk Behaviors By Strengthening Protection During Childhood." <i>Archives of Pediatrics & Adolescent Medicine</i> 153: 226-234.	4 0 149 206 8.0 Cch -0.17 -0.13 .12 NS - - -		
School-Interventions			
Bry, B. H. (1982). "Reducing the incidence of adolescent problems through preventive intervention: One- and five-year follow-up." <i>American Journal of Community Psychology</i> 10: 265-276.	4 0 30 30 5.0 Crs -0.52 0.00 .05 S* 0.00 0.00 .00 0		

Table IV–K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information	Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)	Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)
Mentoring	Design Score Researcher Role N (Prog) N (Comp) Follow-up (yrs) Crime Outcome	ES AdjES p Sig	ES AdjES p Sig
O'Donnell, Clifford R., Tony Lydgate, and Walter S. O. Fo. (1979). "The Buddy System: Review and Follow-Up." <i>Child Behavior Therapy</i> 1: 161-169. A mentoring program with contingency contracting for youth with behavioral and academic problems, referred mostly by schools.	5 0 335 218 3.0 At	0.10 0.00 .23 NS	0.00 0.00 .00 0
Grossman, J. B., Tieney, J. P. (1998). "Does mentoring work? An impact study of the Big Brothers Big Sisters program." <i>Evaluation Review</i> 22(3): 403-426. The research design was marked down because the outcome variable measured in this evaluation was not a direct crime-related outcome.	3 0 487 472 1.5 Sh	-0.13 -0.06 .05 S*	- - -
McGill, D. E., Mihalic, S. F., and Grotzpeier, J. K. (1998). <i>Blueprints for Violence Prevention, Book Two: Big Brothers Big Sisters of America</i> . Boulder, CO: Center for the Study and Prevention of Violence.	0 - -	0.00 - -	0.00 0.00 .00 0
McCord, J. (1978). "A thirty-year follow up of treatment effects." <i>American Psychologist</i> 33(March): 284-289. This is the result for the Cambridge-Somerville Youth Study where youth from 1939 to 1945 got what amounted to mentoring services from counselors (tutoring, medical assistance, friendly counsel) twice a month.	5 0 253 253 30.0 Ct	-0.01 -0.01 .92 NS	- - -
O'Donnell, Clifford R., Tony Lydgate, and Walter S. O. Fo. 1979. "The Buddy System: Review and Follow-Up." <i>Child Behavior Therapy</i> 1: 161-169. A mentoring program with contingency contracting for youth with behavioral and academic problems, referred mostly by schools.	5 0 335 218 3.0 At	- - -	- - -
Quantum Opportunities Program			
Elliot, D. S., Lattimore, C. B., Mihalic, S. F., Grotzpeier, J. K., and Taggart, R. (1998). <i>Blueprints for Violence Prevention, The Quantum Opportunities Program</i> . Boulder, Colorado: Institute of Behavioral Science, Center for the Study and Prevention of Violence, Chapter 3.	4 0 56 44 2.0 Sc	-0.42 -0.31 .04 S**	-0.40 -0.30 .05 S**
Alternative Education			
Cox, Stephen M. (1999). "An assessment of an alternative education program for at-risk delinquent youth." <i>Journal of Research in Crime and Delinquency</i> 36(3): 323-336.	5 0 41 42 1.0 Sd	0.24 0.00 .28 NS	0.00 0.00 .00 0
Other Community-Based Juvenile Offender Programs			
Bank, L., Martone, J. H., Reid, J. B., Patterson, G. R., and Weinrott, M. R. (1991). "A comparative evaluation of parent-training interventions for families of chronic delinquents." <i>Journal of Abnormal Child Psychology</i> 19(1): 15-33. The test was a parent training program based on social-interactional perspective vs. regular juvenile court services that included family therapy and behavioral interventions.	5 1 28 27 4.0 Crc	- - -	- - -
Lee, R., and Oleinik, S. (1981). "Professional outreach counseling can help the juvenile probationer: A two-year follow-up study." <i>Personnel and Guidance Journal</i> 59: 445-449. This is Project Crest, a program in Florida for adjudicated delinquents. The program supplements regular probation by adding a separate counselor who supplied various outreach counseling services.	3 0 30 31 2.0 At	- - -	- - -
Spence, S. H., and Marzillier, J. S. (1981). "Social skills training with adolescent male offenders: 11. Short-term, long-term and generalized effects." <i>Behavior Research & Therapy</i> 19: 349-368. This intervention used Social Skills Training, a therapeutic package consisting of modeling, role-playing, feedback, and social reinforcement.	4 0 32 24 0.5 Ct	- - -	- - -
Haapanen, R., Boyken, G., Henderson, S., and Britton, L. (1988). <i>Drug Testing for Youthful Offenders on Parole: An Experimental Study</i> . State of California Youth Authority. This result is for low levels of drug testing vs. medium levels.	5 0 886 442 4.0 At	- - -	- - -
Haapanen, R., Boyken, G., Henderson, S., and Britton, L. (1998). <i>Drug Testing for Youthful Offenders on Parole: An Experimental Study</i> . State of California Youth Authority. This result is for low levels of drug testing vs. high levels.	5 0 630 442 4.0 At	- - -	- - -
Shore, M. F., and Massimo, J. L. (1979). "Fifteen years after treatment: A follow-up study of comprehensive vocationally oriented psychotherapy." <i>American Journal of Orthopsychiatry</i> 49: 240-245.	Lt3 0 0 0 0.00	- - -	- - -
Chandler, M. J. (1973). "Egocentrism and antisocial behavior: The assessment and training of social perspective-taking skills." <i>Developmental Psychology</i> 9: 326-333.	n/a 0 0 0 1.5 Cra	- - -	- - -

Table IV—K: Program Evaluations Reviewed for the Cost-Benefit Analysis

Studies Reviewed for Criminal Outcome Effects	Research Design Information			Difference in the proportion of offenders v. non-offenders (negative ES = lower crime)			Difference in the Mean Number of Offenses (of the proportion that Offend or Re-Offend)		
	Design Score	Researcher Role	Follow-up (yrs)	N (Prog)	N (Comp)	Crime Outcome	ES	AdjES	p
Notes to Information Listed: The "Design Score" is a measure of the overall level of confidence that can be placed in the findings based on how the evaluation was designed—a "5" is the highest score, "1" is the lowest. "Researcher Role" is whether the program was carried out by the developer (1) or whether it was a "real world" program (0). "N(Prog)" and "N(Comp)" are the numbers in the treatment and comparison groups. "Follow-up (yrs)" is the follow up time in years. "Crime Outcome" is a code for the type of recidivism measure used in the study. "ES" is the mean difference effect size approximated from proportion data (dichotomous group recidivism rates) using the arcsine transformation and adjusted using the Hedges correction for small sample sizes as described in Lipsey & Wilson(2000). "AdjES" is the Institute-adjusted effect size; p is the significance level; and 'Sig' indicates significance levels (NS=p>.10; S*=>.05; S**=>.01; S***=>.01).									
Moore, R. H. (1987). "Effectiveness of citizen volunteers functioning as counselors for high-risk young male offenders." <i>Psychological Reports</i> 61: 823-830.	4	0	50	50	1.0	At	-	-	-
Weisz, John R., Walter, Bernadette R., Weiss, Bahr, Fernandez, Gustavo A., and Mikow, Victoria A. 1990. "Arrests Among Emotionally Disturbed Violent and Assultive Individuals Following Minimal Versus Lengthy Intervention Through North Carolina's Willie M Program." <i>Journal of Consulting and Clinical Psychology</i> 58(6): 720-728.	3	0	147	21	2.0	At	-	-	-
Willman, Mark T. and John R. Snortum. (1982.) "A Police Program for Employment of Youth Gang Members." <i>International Journal of Offender Therapy and Comparative Criminology</i> 26:207-214.	3	0	68	68	1.0	D	-	-	-
Hackler, James C. and John L. Hagan. (1975). "Work and Teaching Machines as Delinquency Prevention Tools: A Four-Year Follow-Up." <i>Social Service Review</i> 49:92-106. This is the effect for the work program.	4	0	85	70	4.0	At	-	-	-
Byres, John A. (1981.) "Evaluation of an Attendance Center Program for Male Juvenile Probationers." <i>Canadian Journal of Criminology</i> 23: 343-355. This research reports the results of an "attendance center" for high risk juvenile probationers in Canada vs. a matched regular probation group.	3	0	56	84	1.0	At	.01	.01	.95 NS
Byres, John A. (1981.) "Evaluation of an Attendance Center Program for Male Juvenile Probationers." <i>Canadian Journal of Criminology</i> 23: 343-355. This research reports the results of an "attendance center" for high risk juvenile probationers in Canada vs. a matched regular probation group.	3	0	56	84	1.0	At	.01	.01	.95 NS

Table IV—L

Nurse Home Visitation (the children)

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person	
	Estimated effect size (from research findings)	0.000		-0.227				
	Expected outcomes for those ...							
	...without the program ⁽²⁾	100.0%	X	0.45	=	0.450		
	...with the program (from effect sizes)	100.0%	X	0.33	=	0.325		
	Expected change in the number of offenses ⁽²⁾						-0.125	
Adjustments	Adjustment 1: (felonies as % of total)						38.0%	
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)						28.1%	
	Without the program, the adjusted expected number of offenses per person						0.610	
	With the program, the adjusted expected number of offenses per person						0.440	
	Expected change in the long-run number of offenses, after adjustments						-0.1693	
	Percentage change						-27.8%	
Taxpayer CJS Costs	Cost of One Future Offense	Total	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.
		-\$238,659	-\$39,580	-\$39,271	-\$29,587	-\$5,068	-\$6,127	\$0
		W/O Prog., offense distribution ⁽²⁾	100%	2.47%	1.26%	10.00%	23.91%	47.42%
		Expected cost (PV) of one offense	-\$20,716	-\$5,897	-\$500	-\$3,927	-\$7,073	-\$2,403
		With Prog., offense distribution	100%	2.47%	1.26%	10.00%	23.91%	47.42%
		Expected cost (PV) of one offense	-\$20,716	-\$5,897	-\$500	-\$3,927	-\$7,073	-\$2,403
		Adj. 4: (Overall adjustment to cost)	0.9					
	Program Benefits and Costs	Future CJS costs without program	-\$11,365					
		Future CJS costs with program	-\$8,208					
		Future CJS costs avoided (incurred)	\$3,157					
		Incremental Treatment Cost (savings)	\$7,733					
Victim Monetary Costs	One Victimization Per Offense	NPV of the program	-\$4,576					
		Benefits per dollar of cost	\$0.41					
		Pct. reduction to break-even	-68.0%					
		Estimated present value cost						
		Distribution of one victimization ⁽²⁾	100.00%	2.47%	1.26%	10.00%	23.91%	47.42%
	Multiple Victimization Per Offense	Expected cost, one victimization	-\$16,184	-\$15,591	-\$49	-\$153	-\$218	-\$173
		Times prog. change in offenses	\$2,740					
		Cumulative program benefits	\$5,897					
		Cumulative NPV	-\$1,836					
		Cumulative benefits/dollar of cost	\$0.76					
Vic. Quality of Life Costs	One Victimization	Dist. of multiple victimizations	100%	0.021%	0.05%	0.38%	0.74%	6.27%
		Lambda per official offense	129.19					92.54%
		Expected vict. cost, one offense	-\$21,940	-\$17,119	-\$248	-\$748	-\$879	-\$2,946
		Lambda times change in offenses	-21.88					\$0
		Expected vict. benefits with prog.	\$3,715	\$2,899	\$42	\$127	\$149	\$499
	Multiple Victimization	Cumulative program benefits	\$6,872					
		Cumulative NPV	-\$861					
		Cumulative benefits/dollar of cost	\$0.89					
		Estimated present value cost						
		Expected cost, one victimization	-\$31,146	-\$1,170,806	-\$51,458	-\$3,790	-\$4,962	\$0
	Multiple Victimization	Times prog. change in offenses	\$5,274	-\$28,930	-\$651	-\$379	-\$1,186	\$0
		Cumulative program benefits	\$11,171					\$0
		Cumulative NPV	\$3,438					\$0
		Cumulative benefits/dollar of cost	\$1.44					
		Expected vict. cost, one offense	-\$41,680	-\$31,766	-\$3,287	-\$1,851	-\$4,775	\$0

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Self-Reported Arrests at age 15

Table IV—L

Nurse Home Visitation (the mothers)

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses	...the Avg. # of Offenses per Offender	Expected Number of Offenses per Person			
	Estimated effect size (from research findings)				0.000	-0.349		
	Expected outcomes for those ...							
	...without the program ⁽²⁾	100.0%	X	0.69	=	0.690		
	...with the program (from effect sizes)	100.0%	X	0.41	=	0.410		
	Expected change in the number of offenses ⁽²⁾					-0.280		
Adjustments	Adjustment 1: (felonies as % of total)					25.0%		
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)					80.6%		
	Without the program, the adjusted expected number of offenses per person					0.214		
	With the program, the adjusted expected number of offenses per person					0.127		
	Expected change in the long-run number of offenses, after adjustments					-0.0868		
	Percentage change					-40.6%		
Taxpayer CJS Costs	Cost of One Future Offense	Total	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.
		-\$390,754	-\$88,548	-\$97,028	-\$50,905	-\$16,948	-\$18,829	\$0
		W/O Prog., offense distribution ⁽²⁾	100%	1.01%	5.44%	3.45%	11.92%	42.73%
		Expected cost (PV) of one offense	-\$32,108	-\$3,961	-\$4,815	-\$3,349	-\$6,066	-\$7,243
		With Prog., offense distribution	100%	1.01%	5.44%	3.45%	11.92%	42.73%
	Program Benefits and Costs	Expected cost (PV) of one offense	-\$32,108	-\$3,961	-\$4,815	-\$3,349	-\$6,066	-\$7,243
		Adj. 4: (Overall adjustment to cost)	0.9					
		Future CJS costs without program	-\$6,183					
	Sum- mary	Future CJS costs with program	-\$3,674					
		Future CJS costs avoided (incurred)	\$2,509					
		Incremental Treatment Cost (savings)	\$7,733					
Victim Monetary Costs	One Victimi- zation Per Offense	NPV of the program	-\$5,224					
		Benefits per dollar of cost	\$0.32					
		Pct. reduction to break-even	-125.1%					
		Estimated present value cost						
		Distribution of one victimization ⁽²⁾	100.00%	1.01%	5.44%	3.45%	11.92%	42.73%
	Multiple Victimi- zations Per Offense	Expected cost, one victimization	-\$10,338	-\$9,601	-\$292	-\$76	-\$149	-\$220
		Times prog. change in offenses	\$898					
		Cumulative program benefits	\$3,407					
		Cumulative NPV	-\$4,326					
		Cumulative benefits/dollar of cost	\$0.44					
Vic. Quality of Life Costs	One Victimi- zation	Dist. of multiple victimizations	100%	0.003%	0.17%	0.11%	0.25%	5.09%
		Lambda per official offense	300.46					94.38%
		Expected vict. cost, one offense	-\$21,952	-\$9,687	-\$2,736	-\$729	-\$934	-\$7,864
		Lambda times change in offenses	-26.09					\$0
		Expected vict. benefits with prog.	\$1,906	\$841	\$238	\$63	\$81	\$683
	Multiple Victimi- zations	Cumulative program benefits	\$4,415					\$0
		Cumulative NPV	-\$3,318					\$0
		Cumulative benefits/dollar of cost	\$0.57					
		Estimated present value cost						
		Expected cost, one victimization	-\$22,689	-\$1,757,435	-\$71,281	-\$5,468	-\$6,786	\$0

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony convictions by age 33

Table IV—L

Early Childhood Education and Therapeutic Child Care for Disadvantaged Youth

	Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses	...the Avg. # of Offenses per Offender	Expected Number of Offenses per Person	
		-0.115	-0.165			0.365	0.247
	Estimated effect size (from research findings)						
	Expected outcomes for those ...						
	...without the program ⁽²⁾	18.7%	X	1.95	=	0.365	
	...with the program (from effect sizes)	14.4%	X	1.71	=	0.247	
	Expected change in the number of offenses ⁽²⁾						-0.119
Adjustments	Adjustment 1: (felonies as % of total)						100.0%
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)						61.6%
	Without the program, the adjusted expected number of offenses per person						0.593
	With the program, the adjusted expected number of offenses per person						0.400
	Expected change in the long-run number of offenses, after adjustments						-0.1928
	Percentage change						-32.5%
Taxpayer CJS Costs	Total	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.
	Cost of One Future Offense						
	Present value cost of one offense	-\$163,713	-\$73,385	-\$80,055	-\$59,930	-\$10,004	-\$14,459
	W/O Prog., offense distribution ⁽²⁾	100%	1.39%	0.71%	5.63%	13.45%	59.73%
	Expected cost (PV) of one offense	-\$24,102	-\$2,277	-\$522	-\$4,505	-\$8,063	-\$5,976
	With Prog., offense distribution	100%	1.39%	0.71%	5.63%	13.45%	59.73%
	Expected cost (PV) of one offense	-\$24,102	-\$2,277	-\$522	-\$4,505	-\$8,063	-\$5,976
	Adj. 4: (Overall adjustment to cost)	0.9					
	Program Benefits and Costs						
	Future CJS costs without program	-\$12,862					
Victim Monetary Costs	Sum- mary	Future CJS costs with program	-\$8,679				
	NPV of the program	\$4,182					
	Benefits per dollar of cost	\$8,936					
	Pct. reduction to break-even	-69.5%					
	One Victimi- zation Per Offense						
Multiple Victi- mizations Per Offense	Estimated present value cost						
	Distribution of one victimization ⁽²⁾	100.00%	-\$872,482	-\$5,279	-\$1,995	-\$1,238	-\$486
	Expected cost, one victimization	-\$12,740	1.39%	0.71%	5.63%	13.45%	59.73%
	Times prog. change in offenses	\$2,456	-\$12,133	-\$38	-\$112	-\$167	-\$290
	Cumulative program benefits	\$6,639					
	Cumulative NPV	-\$2,298					
	Cumulative benefits/dollar of cost	\$0.74					
	Dist. of multiple victimizations	100%	0.008%	0.04%	0.31%	0.48%	12.18%
	Lambda per official offense	175.49					
	Expected vict. cost, one offense	-\$25,105	-\$12,243	-\$351	-\$1,074	-\$1,045	-\$10,392
Vic. Quality of Life Costs	Multiple Victi- mizations	Lambda times change in offenses	-\$33.84				
	One Victimi- zation	Expected vict. benefits with prog.	\$4,841	\$2,361	\$68	\$207	\$202
		Cumulative program benefits	\$9,023				
		Cumulative NPV	\$87				
		Cumulative benefits/dollar of cost	\$1.01				
Multiple Victi- mizations	Estimated present value cost						
	Expected cost, one victimization	-\$1,618,962	-\$69,971	-\$4,940	-\$6,722	\$0	\$0
	Times prog. change in offenses	-\$22,515	-\$498	-\$278	-\$904	\$0	\$0
	Cumulative program benefits	\$4,665					
	Cumulative NPV	\$11,304					
	Cumulative benefits/dollar of cost	\$2,368					
	Expected vict. cost, one offense	\$1.26					

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent

(2) Based on: Felony re-convictions in Washington, 7-year follow-up

Table IV—L

Seattle Social Development Project

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person	
	Estimated effect size (from research findings)	-0.125		0.000				
	Expected outcomes for those ...							
	...without the program ⁽²⁾	18.7%	X	1.95	=	0.365		
	...with the program (from effect sizes)	14.1%	X	1.95	=	0.275		
	Expected change in the number of offenses ⁽²⁾						-0.090	
Adjustments	Adjustment 1: (felonies as % of total)						100.0%	
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)						43.5%	
	Without the program, the adjusted expected number of offenses per person						0.839	
	With the program, the adjusted expected number of offenses per person						0.632	
	Expected change in the long-run number of offenses, after adjustments						-0.2075	
	Percentage change						-24.7%	
Taxpayer CJS Costs	Total		Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.
	Cost of One Future Offense	\$189,789	-\$60,795	-\$65,479	-\$53,536	-\$7,820	-\$11,785	\$0
	W/O Prog., offense distribution ⁽²⁾	100%	1.39%	0.71%	5.63%	13.45%	59.73%	19.08% 0.00%
	Expected cost (PV) of one offense	-\$20,879	-\$2,639	-\$433	-\$3,685	-\$7,203	-\$4,671	-\$2,249 \$0
	With Prog., offense distribution	100%	1.39%	0.71%	5.63%	13.45%	59.73%	19.08% 0.00%
	Expected cost (PV) of one offense	-\$20,879	-\$2,639	-\$433	-\$3,685	-\$7,203	-\$4,671	-\$2,249 \$0
	Adj. 4: (Overall adjustment to cost)	0.9						
	Future CJS costs without program	-\$15,774						
	Future CJS costs with program	-\$11,875						
	Future CJS costs avoided (incurred)	\$3,898						
Victim Monetary Costs	Incremental Treatment Cost (savings)	\$4,355						
	Sum- mary	NPV of the program	-\$456					
	Program Benefits and Costs	Benefits per dollar of cost	\$0.90					
	One Victimi- zation Per Offense	Pct. reduction to break-even	-27.6%					
	Multiple Victimi- zations Per Offense	Estimated present value cost						
Vic. Quality of Life Costs	One Victimi- zation	Distribution of one victimization ⁽²⁾	100.00%	1.39%	0.71%	5.63%	13.45%	59.73% 19.08% 0.00%
	Multiple Victimi- zations	Expected cost, one victimization	-\$14,769	-\$14,066	-\$44	-\$130	-\$193	-\$337 \$0 \$0
	One Victimi- zation	Times prog. change in offenses	\$3,064					
	Multiple Victimi- zations	Cumulative program benefits	\$6,962					
	One Victimi- zation	Cumulative NPV	\$2,608					
	Multiple Victimi- zations	Cumulative benefits/dollar of cost	\$1.60					
	One Victimi- zation	Dist. of multiple victimizations	100%	0.008%	0.04%	0.31%	0.48%	12.18% 86.98% 0.00%
	Multiple Victimi- zations	Lambda per official offense	175.49					
	One Victimi- zation	Expected vict. cost, one offense	-\$29,104	-\$14,193	-\$407	-\$1,245	-\$1,212	-\$12,047 \$0 \$0
	Multiple Victimi- zations	Lambda times change in offenses	-36.41					
(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent. (2) Based on: Felony re-convictions in Washington, 7-year follow-up	One Victimi- zation	Expected vict. benefits with prog.	\$6,038	\$2,944	\$85	\$258	\$251	\$2,499 \$0 \$0
	Multiple Victimi- zations	Cumulative program benefits	\$9,936					
	One Victimi- zation	Cumulative NPV	\$5,581					
	Multiple Victimi- zations	Cumulative benefits/dollar of cost	\$2.28					

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington, 7-year follow-up

Table IV—L

Quantum Opportunities Program

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses	...the Avg. # of Offenses per Offender	Expected Number of Offenses per Person				
	Estimated effect size (from research findings)	-0.313							
Expected outcomes for those ...									
...without the program ⁽²⁾	18.7%	X	1.95	=	0.365				
...with the program (from effect sizes)	8.2%	X	1.51	=	0.124				
Expected change in the number of offenses ⁽²⁾					-0.241				
Adjustments	Adjustment 1: (felonies as % of total)				100.0%				
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)				61.6%				
	Without the program, the adjusted expected number of offenses per person				0.593				
	With the program, the adjusted expected number of offenses per person				0.202				
	Expected change in the long-run number of offenses, after adjustments				-0.3914				
	Percentage change				-66.0%				
		Total	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.	
Taxpayer CJS Costs	Cost of One Future Offense	Present value cost of one offense	-\$360,819	-\$85,913	-\$89,705	-\$51,804	-\$12,631	-\$18,370	\$0
		W/O Prog., offense distribution ⁽²⁾	100%	1.39%	0.71%	5.63%	13.45%	59.73%	19.08% 0.00%
		Expected cost (PV) of one offense	-\$28,698	-\$5,018	-\$611	-\$5,048	-\$6,970	-\$7,545	-\$3,505 \$0
		With Prog., offense distribution	100%	1.39%	0.71%	5.63%	13.45%	59.73%	19.08% 0.00%
		Expected cost (PV) of one offense	-\$28,698	-\$5,018	-\$611	-\$5,048	-\$6,970	-\$7,545	-\$3,505 \$0
		Adj. 4: (Overall adjustment to cost)	0.9						
	Program Benefits and Costs	Future CJS costs without program	-\$15,314						
		Future CJS costs with program	-\$5,205						
		Future CJS costs avoided (incurred)	\$10,109						
		Incremental Treatment Cost (savings)	\$18,964						
	Sum- mary	NPV of the program	-\$8,854						
		Benefits per dollar of cost	\$0.53						
		Pct. reduction to break-even	-123.8%						
Victim Monetary Costs	One Victimi- zation Per Offense	Estimated present value cost		-\$920,401	-\$5,747	-\$2,175	-\$1,304	-\$520	\$0 \$0
		Distribution of one victimization ⁽²⁾	100.00%	1.39%	0.71%	5.63%	13.45%	59.73%	19.08% 0.00%
		Expected cost, one victimization	-\$13,449	-\$12,800	-\$41	-\$122	-\$175	-\$310	\$0 \$0
		Times prog. change in offenses	\$5,264						
		Cumulative program benefits	\$15,374						
		Cumulative NPV	-\$3,590						
		Cumulative benefits/dollar of cost	\$0.81						
	Multiple Victimi- zations Per Offense	Dist. of multiple victimizations	100%	0.008%	0.04%	0.31%	0.48%	12.18%	86.98% 0.00%
		Lambda per official offense	175.49						
		Expected vict. cost, one offense	-\$26,680	-\$12,915	-\$383	-\$1,171	-\$1,101	-\$11,111	\$0 \$0
		Lambda times change in offenses	-68.69						
		Expected vict. benefits with prog.	\$10,443	\$5,055	\$150	\$458	\$431	\$4,349	\$0 \$0
		Cumulative program benefits	\$20,553						
		Cumulative NPV	\$1,589						
		Cumulative benefits/dollar of cost	\$1.08						
Vic. Quality of Life Costs	One Victimi- zation	Estimated present value cost		-\$1,707,879	-\$76,163	-\$5,385	-\$7,081	\$0	\$0 \$0
		Expected cost, one victimization	-\$25,549	-\$23,751	-\$542	-\$303	-\$953	\$0	\$0 \$0
		Times prog. change in offenses	\$10,000						
		Cumulative program benefits	\$25,374						
		Cumulative NPV	\$6,410						
		Cumulative benefits/dollar of cost	\$1.34						
	Multiple Victimi- zations	Expected vict. cost, one offense	-\$37,913	-\$23,965	-\$5,070	-\$2,899	-\$5,979	\$0	\$0 \$0
		Expected vict. benefits with prog.	\$14,840	\$9,380	\$1,985	\$1,135	\$2,340	\$0	\$0 \$0
		Cumulative program benefits	\$35,392						
		Cumulative NPV	\$16,428						
		Cumulative benefits/dollar of cost	\$1.87						

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington, 7-year follow-up

Table IV—L

Mentoring

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses	...the Avg. # of Offenses per Offender	Expected Number of Offenses per Person			
	Estimated effect size (from research findings)	-0.045						
Expected outcomes for those ...								
...without the program ⁽²⁾	18.7%	X	1.95	=	0.365			
...with the program (from effect sizes)	17.0%	X	1.95	=	<u>0.332</u>			
Expected change in the number of offenses ⁽²⁾					<u>-0.033</u>			
Adjustments	Adjustment 1: (felonies as % of total)				100.0%			
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)				56.3%			
	Without the program, the adjusted expected number of offenses per person				0.650			
	With the program, the adjusted expected number of offenses per person				<u>0.590</u>			
	Expected change in the long-run number of offenses, after adjustments				<u>-0.0592</u>			
	Percentage change				-9.1%			
Taxpayer CJS Costs	Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.
Cost of One Future Offense	Present value cost of one offense	-\$258,894	-\$73,827	-\$77,601	-\$55,972	-\$8,969	-\$13,745	\$0
	W/O Prog., offense distribution ⁽²⁾	100%	1.39%	0.71%	5.63%	13.45%	59.73%	19.08% 0.00%
Program Benefits and Costs	Expected cost (PV) of one offense	<u>-\$24,004</u>	-\$3,600	-\$525	-\$4,367	-\$7,531	-\$5,358	-\$2,623 \$0
	With Prog., offense distribution	100%	1.39%	0.71%	5.63%	13.45%	59.73%	19.08% 0.00%
Sum- mary	Expected cost (PV) of one offense	<u>-\$24,004</u>	-\$3,600	-\$525	-\$4,367	-\$7,531	-\$5,358	-\$2,623 \$0
	Adj. 4: (Overall adjustment to cost)	0.9						
Victim Monetary Costs	Future CJS costs without program	-\$14,033						
	Future CJS costs with program	<u>-\$12,754</u>						
One Victimi- zation Per Offense	Future CJS costs avoided (incurred)	<u>\$1,279</u>						
	Incremental Treatment Cost (savings)	\$1,054						
Multiple Victimi- zations Per Offense	NPV of the program	\$225						
	Benefits per dollar of cost	\$1.21						
Vic. Quality of Life Costs	Pct. reduction to break-even	-7.5%						
	Estimated present value cost		-\$1,044,272	-\$6,319	-\$2,388	-\$1,482	-\$574	\$0 \$0
One Victimi- zation	Distribution of one victimization ⁽²⁾	100.00%	1.39%	0.71%	5.63%	13.45%	59.73%	19.08% 0.00%
	Expected cost, one victimization	<u>-\$15,244</u>	-\$14,523	-\$45	-\$134	-\$199	-\$343	\$0 \$0
Multiple Victimi- zations	Times prog. change in offenses	\$902						
	Cumulative program benefits	\$2,181						
	Cumulative NPV	<u>\$1,127</u>						
	Cumulative benefits/dollar of cost	\$2.07						
	Dist. of multiple victimizations	100%	0.008%	0.04%	0.31%	0.48%	12.18%	86.98% 0.00%
	Lambda per official offense	175.49						
	Expected vict. cost, one offense	<u>-\$29,892</u>	-\$14,653	-\$421	-\$1,286	-\$1,251	-\$12,281	\$0 \$0
	Lambda times change in offenses	-10.39						
	Expected vict. benefits with prog.	\$1,769	\$867	\$25	\$76	\$74	\$727	\$0 \$0
	Cumulative program benefits	\$3,048						
	Cumulative NPV	<u>\$1,994</u>						
	Cumulative benefits/dollar of cost	\$2.89						
	Estimated present value cost		-\$1,937,732	-\$83,749	-\$5,912	-\$8,046	\$0	\$0 \$0
	Expected cost, one victimization	<u>-\$28,959</u>	-\$26,948	-\$596	-\$333	-\$1,082	\$0	\$0 \$0
	Times prog. change in offenses	\$1,714						
	Cumulative program benefits	\$3,895						
	Cumulative NPV	<u>\$2,841</u>						
	Cumulative benefits/dollar of cost	\$3.70						
	Expected vict. cost, one offense	<u>-\$42,742</u>	-\$27,191	-\$5,575	-\$3,182	-\$6,793	\$0	\$0 \$0
	Expected vict. benefits with prog.	\$2,530	\$1,610	\$330	\$188	\$402	\$0	\$0 \$0
	Cumulative program benefits	\$5,578						
	Cumulative NPV	<u>\$4,524</u>						
	Cumulative benefits/dollar of cost	\$5.29						

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington, 7-year follow-up

Table IV—L

National Job Corps

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses	...the Avg. # of Offenses per Offender	Expected Number of Offenses per Person				
	Estimated effect size (from research findings)	-0.079			0.000				
Adjustments	Expected outcomes for those ...								
	...without the program ⁽²⁾	18.7%	X	1.95	=	0.365			
	...with the program (from effect sizes)	15.7%	X	1.95	=	0.307			
	Expected change in the number of offenses ⁽²⁾					-0.058			
	Adjustment 1: (felonies as % of total)					100.0%			
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)					76.1%			
	Without the program, the adjusted expected number of offenses per person					0.480			
	With the program, the adjusted expected number of offenses per person					0.404			
	Expected change in the long-run number of offenses, after adjustments					-0.0768			
	Percentage change					-16.0%			
		Total	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.	
Taxpayer CJS Costs	Cost of One Future Offense	Present value cost of one offense	-\$428,049	-\$103,362	-\$104,229	-\$58,575	-\$15,104	-\$20,352	\$0
		W/O Prog., offense distribution ⁽²⁾	100%	1.39%	0.71%	5.63%	13.45%	59.73%	19.08% 0.00%
		Expected cost (PV) of one offense	-\$33,340	-\$5,953	-\$735	-\$5,865	-\$7,881	-\$9,022	-\$3,883 \$0
		With Prog., offense distribution	100%	1.39%	0.71%	5.63%	13.45%	59.73%	19.08% 0.00%
		Expected cost (PV) of one offense	-\$33,340	-\$5,953	-\$735	-\$5,865	-\$7,881	-\$9,022	-\$3,883 \$0
	Program Benefits and Costs	Adj. 4: (Overall adjustment to cost)	0.9						
		Future CJS costs without program	-\$14,417						
		Future CJS costs with program	-\$12,112						
		Future CJS costs avoided (incurred)	\$2,305						
		Incremental Treatment Cost (savings)	\$6,123						
Victim Monetary Costs	One Victimization Per Offense	NPV of the program	-\$3,818						
		Benefits per dollar of cost	\$0.38						
		Pct. reduction to break-even	-42.5%						
		Estimated present value cost							
		Distribution of one victimization ⁽²⁾	100.00%	1.39%	0.71%	5.63%	13.45%	59.73%	19.08% 0.00%
	Multiple Victimization Per Offense	Expected cost, one victimization	-\$15,143	-\$14,428	-\$45	-\$134	-\$198	-\$338	\$0 \$0
		Times prog. change in offenses	\$1,163						
		Cumulative program benefits	\$3,469						
		Cumulative NPV	-\$2,654						
		Cumulative benefits/dollar of cost	\$0.57						
Vic. Quality of Life Costs	One Victimization	Dist. of multiple victimizations	100%	0.008%	0.04%	0.31%	0.48%	12.18%	86.98% 0.00%
		Lambda per official offense	175.49						
		Expected vict. cost, one offense	-\$29,596	-\$14,558	-\$418	-\$1,277	-\$1,243	-\$12,100	\$0 \$0
		Lambda times change in offenses	-13.48						
		Expected vict. benefits with prog.	\$2,274	\$1,119	\$32	\$98	\$95	\$930	\$0 \$0
	Multiple Victimization	Cumulative program benefits	\$4,579						
		Cumulative NPV	-\$1,544						
		Cumulative benefits/dollar of cost	\$0.75						
		Estimated present value cost							
		Expected cost, one victimization	-\$28,771	-\$1,925,172	-\$83,206	-\$5,874	-\$7,994	\$0	\$0 \$0

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington, 7-year follow-up

Table IV—L
Job Training Partnership Act

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person	
	Estimated effect size (from research findings)		0.100		0.000			
	Expected outcomes for those ...							
	...without the program ⁽²⁾		18.7% X 1.95 = 0.365					
	...with the program (from effect sizes)		22.8% X 1.95 = 0.445					
	Expected change in the number of offenses ⁽²⁾						0.079	
Adjustments	Adjustment 1: (felonies as % of total)						100.0%	
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)						76.1%	
	Without the program, the adjusted expected number of offenses per person						0.480	
	With the program, the adjusted expected number of offenses per person						<u>0.585</u>	
	Expected change in the long-run number of offenses, after adjustments						0.1044	
	Percentage change						21.7%	
Taxpayer CJS Costs	Cost of One Future Offense	Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug Misd.
		Present value cost of one offense	-\$428,049	-\$103,362	-\$104,229	-\$58,575	-\$15,104	-\$20,352 \$0
		W/O Prog., offense distribution ⁽²⁾	100%	1.39%	0.71%	5.63% 13.45%	59.73%	19.08% 0.00%
		Expected cost (PV) of one offense	-\$33,340	-\$5,953	-\$735	-\$5,865	-\$7,881	-\$9,022 -\$3,883 \$0
		With Prog., offense distribution	100%	1.39%	0.71%	5.63% 13.45%	59.73%	19.08% 0.00%
	Program Benefits and Costs	Expected cost (PV) of one offense	-\$33,340	-\$5,953	-\$735	-\$5,865	-\$7,881	-\$9,022 -\$3,883 \$0
		Adj. 4: (Overall adjustment to cost)	0.9					
	Sum- mary	Future CJS costs without program	-\$14,417					
		Future CJS costs with program	-\$17,548					
		Future CJS costs avoided (incurred)	-\$3,131					
		Incremental Treatment Cost (savings)	\$1,431					
		NPV of the program	-\$4,562					
Victim Monetary Costs	One Victimi- zation Per Offense	Benefits per dollar of cost	-\$2.19					
		Pct. reduction to break-even	-9.9%					
		Estimated present value cost						
		Distribution of one victimization ⁽²⁾	100.00%	1.39%	0.71%	5.63% 13.45%	59.73%	19.08% 0.00%
		Expected cost, one victimization	-\$15,143	-\$14,428	-\$45	-\$134	-\$198	-\$338 \$0 \$0
	Multiple Victimi- zations Per Offense	Times prog. change in offenses	-\$1,580					
		Cumulative program benefits	-\$4,711					
		Cumulative NPV	-\$6,142					
		Cumulative benefits/dollar of cost	-\$3.29					
		Dist. of multiple victimizations	100%	0.008%	0.04%	0.31% 0.48%	12.18%	86.98% 0.00%
Vic. Quality of Life Costs	One Victimi- zation	Lambda per official offense	175.49					
		Expected vict. cost, one offense	-\$29,596	-\$14,558	-\$418	-\$1,277	-\$1,243	-\$12,100 \$0 \$0
		Lambda times change in offenses	18.31					
		Expected vict. benefits with prog.	-\$3,088	-\$1,519	-\$44	-\$133	-\$130	-\$1,263 \$0 \$0
		Cumulative program benefits	-\$6,220					
	Multiple Victimi- zations	Cumulative NPV	-\$7,651					
		Cumulative benefits/dollar of cost	-\$4.35					
		Estimated present value cost						
		Expected cost, one victimization	-\$28,771	-\$1,925,172	-\$83,206	-\$5,874	-\$7,994	\$0 \$0 \$0
		Times prog. change in offenses	-\$3,002	-\$26,773	-\$592	-\$331	-\$1,075	\$0 \$0 \$0
	One Victimi- zation	Cumulative program benefits	-\$7,714					
		Cumulative NPV	-\$9,145					
		Cumulative benefits/dollar of cost	-\$5.39					
	Multiple Victimi- zations	Expected vict. cost, one offense	-\$42,465	-\$27,014	-\$5,539	-\$3,162	-\$6,749	\$0 \$0 \$0
		Expected vict. benefits with prog.	-\$4,431	-\$2,819	-\$578	-\$330	-\$704	\$0 \$0 \$0
		Cumulative program benefits	-\$10,651					

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington, 7-year follow-up

Table IV—L

Multi-Systemic Therapy

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses	...the Avg. # of Offenses per Offender	Expected Number of Offenses per Person			
	Estimated effect size (from research findings)	-0.314						
Adjustments	Expected outcomes for those ...							
	...without the program ⁽²⁾	60.0%	X	2.93	=	1.760		
	...with the program (from effect sizes)	44.4%	X	2.00	=	<u>0.889</u>		
	Expected change in the number of offenses ⁽²⁾					<u>-0.871</u>		
	Adjustment 1: (felonies as % of total)					100.0%		
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)					66.7%		
	Without the program, the adjusted expected number of offenses per person					2.641		
	With the program, the adjusted expected number of offenses per person					<u>1.333</u>		
	Expected change in the long-run number of offenses, after adjustments					<u>-1.3072</u>		
	Percentage change					-49.5%		
Taxpayer CJS Costs	Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.
	Cost of One Future Offense							
	Present value cost of one offense	-\$355,086	-\$90,593	-\$92,705	-\$56,790	-\$10,898	-\$16,122	\$0
	W/O Prog., offense distribution ⁽²⁾	100%	1.29%	1.32%	7.22%	16.71%	55.03%	18.42% 0.00%
	Expected cost (PV) of one offense	<u>-\$30,944</u>	<u>-\$4,591</u>	<u>-\$1,200</u>	<u>-\$6,695</u>	<u>-\$9,492</u>	<u>-\$5,997</u>	<u>-\$2,969</u> \$0
	With Prog., offense distribution	100%	1.29%	1.32%	7.22%	16.71%	55.03%	18.42% 0.00%
	Expected cost (PV) of one offense	<u>-\$30,944</u>	<u>-\$4,591</u>	<u>-\$1,200</u>	<u>-\$6,695</u>	<u>-\$9,492</u>	<u>-\$5,997</u>	<u>-\$2,969</u> \$0
	Adj. 4: (Overall adjustment to cost)	0.9						
	Program Benefits and Costs							
	Future CJS costs without program	-\$73,537						
	Future CJS costs with program	<u>-\$37,133</u>						
	Future CJS costs avoided (incurred)	<u>\$36,404</u>						
	Incremental Treatment Cost (savings)	<u>\$4,743</u>						
	Sum- mary							
	NPV of the program	<u>\$31,661</u>						
	Benefits per dollar of cost	<u>\$7.68</u>						
	Pct. reduction to break-even	<u>-6.4%</u>						
Victim Monetary Costs	One Victimi- zation Per Offense							
	Estimated present value cost		-\$1,039,346	-\$6,289	-\$2,377	-\$1,475	-\$569	\$0 \$0
	Distribution of one victimization ⁽²⁾	100.00%	1.29%	1.32%	7.22%	16.71%	55.03%	18.42% 0.00%
	Expected cost, one victimization	<u>-\$14,253</u>	<u>-\$13,438</u>	<u>-\$83</u>	<u>-\$172</u>	<u>-\$246</u>	<u>-\$313</u>	<u>\$0</u> \$0
	Times prog. change in offenses	<u>\$18,631</u>						
	Cumulative program benefits	<u>\$55,036</u>						
	Cumulative NPV	<u>\$50,293</u>						
	Cumulative benefits/dollar of cost	<u>\$11.60</u>						
	Multiple Victimi- zations Per Offense							
	Dist. of multiple victimizations	100%	0.008%	0.07%	0.41%	0.62%	11.66%	87.23% 0.00%
	Lambda per official offense	168.91						
	Expected vict. cost, one offense	<u>-\$28,742</u>	<u>-\$13,559</u>	<u>-\$779</u>	<u>-\$1,642</u>	<u>-\$1,547</u>	<u>-\$11,215</u>	<u>\$0</u> \$0
	Lambda times change in offenses	<u>-220.79</u>						
	Expected vict. benefits with prog.	<u>\$37,571</u>	<u>\$17,725</u>	<u>\$1,019</u>	<u>\$2,146</u>	<u>\$2,022</u>	<u>\$14,660</u>	<u>\$0</u> \$0
	Cumulative program benefits	<u>\$73,976</u>						
	Cumulative NPV	<u>\$69,233</u>						
	Cumulative benefits/dollar of cost	<u>\$15.60</u>						
Vic. Quality of Life Costs	One Victimi- zation							
	Estimated present value cost		-\$1,928,591	-\$83,354	-\$5,884	-\$8,008	\$0	\$0 \$0
	Expected cost, one victimization	<u>-\$27,803</u>	<u>-\$24,936</u>	<u>-\$1,104</u>	<u>-\$425</u>	<u>-\$1,338</u>	<u>\$0</u>	<u>\$0</u> \$0
	Times prog. change in offenses	<u>\$36,344</u>						
	Cumulative program benefits	<u>\$91,380</u>						
	Cumulative NPV	<u>\$86,637</u>						
	Cumulative benefits/dollar of cost	<u>\$19.27</u>						
	Multiple Victimi- zations							
	Expected vict. cost, one offense	<u>-\$47,955</u>	<u>-\$25,161</u>	<u>-\$10,330</u>	<u>-\$4,065</u>	<u>-\$8,400</u>	<u>\$0</u>	<u>\$0</u> \$0
	Expected vict. benefits with prog.	<u>\$62,685</u>	<u>\$32,890</u>	<u>\$13,503</u>	<u>\$5,313</u>	<u>\$10,980</u>	<u>\$0</u>	<u>\$0</u> \$0
	Cumulative program benefits	<u>\$136,661</u>						
	Cumulative NPV	<u>\$131,918</u>						
	Cumulative benefits/dollar of cost	<u>\$28.81</u>						

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington, 7-year follow-up

Table IV—L

Functional Family Therapy

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person	
	Estimated effect size (from research findings)	-0.254		-0.149				
	Expected outcomes for those ...							
	...without the program ⁽²⁾	45.8%	X	2.44	=	1.117		
	...with the program (from effect sizes)	33.5%	X	2.17	=	<u>0.726</u>		
	Expected change in the number of offenses ⁽²⁾					<u>-0.390</u>		
Adjustments	Adjustment 1: (felonies as % of total)					100.0%		
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)					66.7%		
	Without the program, the adjusted expected number of offenses per person					1.675		
	With the program, the adjusted expected number of offenses per person					<u>1.089</u>		
	Expected change in the long-run number of offenses, after adjustments					<u>-0.5856</u>		
	Percentage change					-35.0%		
Taxpayer CJS Costs	Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.
	Cost of One Future Offense	Present value cost of one offense	-\$355,086	-\$90,593	-\$92,705	-\$56,790	-\$10,898	-\$16,122
	Program Benefits and Costs	W/O Prog., offense distribution ⁽²⁾	100%	1.29%	1.32%	7.22%	16.71%	55.03%
	Sum- mary	Expected cost (PV) of one offense	<u>-\$30,944</u>	-\$4,591	-\$1,200	-\$6,695	-\$9,492	-\$5,997
	One Victimi- zation Per Offense	With Prog., offense distribution	100%	1.29%	1.32%	7.22%	16.71%	55.03%
	Multiple Victimi- zations Per Offense	Expected cost (PV) of one offense	<u>-\$30,944</u>	-\$4,591	-\$1,200	-\$6,695	-\$9,492	-\$5,997
	One Victimi- zation	Adj. 4: (Overall adjustment to cost)	0.9					
	Multiple Victimi- zations	Future CJS costs without program	-\$46,646					
	One Victimi- zation	Future CJS costs with program	<u>-\$30,336</u>					
	Multiple Victimi- zations	Future CJS costs avoided (incurred)	<u>\$16,310</u>					
Victim Monetary Costs	One Victimi- zation Per Offense	Incremental Treatment Cost (savings)	\$2,161					
	One Victimi- zation	NPV of the program	<u>\$14,149</u>					
	Multiple Victimi- zations	Benefits per dollar of cost	<u>\$7.55</u>					
	One Victimi- zation	Pct. reduction to break-even	-4.6%					
	One Victimi- zation	Estimated present value cost		-\$1,039,346	-\$6,289	-\$2,377	-\$1,475	-\$569
	Multiple Victimi- zations	Distribution of one victimization ⁽²⁾	100.00%	1.29%	1.32%	7.22%	16.71%	55.03%
	One Victimi- zation	Expected cost, one victimization	<u>-\$14,253</u>	-\$13,438	-\$83	-\$172	-\$246	-\$313
	Multiple Victimi- zations	Times prog. change in offenses	\$8,347					
	One Victimi- zation	Cumulative program benefits	<u>\$24,657</u>					
	Multiple Victimi- zations	Cumulative NPV	<u>\$22,497</u>					
Vic. Quality of Life Costs	One Victimi- zation	Cumulative benefits/dollar of cost	<u>\$11.41</u>					
	One Victimi- zation	Dist. of multiple victimizations	100%	0.008%	0.07%	0.41%	0.62%	11.66%
	Multiple Victimi- zations	Lambda per official offense	168.91					
	One Victimi- zation	Expected vict. cost, one offense	<u>-\$28,742</u>	-\$13,559	-\$779	-\$1,642	-\$1,547	-\$11,215
	Multiple Victimi- zations	Lambda times change in offenses	-98.92					
	One Victimi- zation	Expected vict. benefits with prog.	<u>\$16,833</u>	\$7,941	\$456	\$962	\$906	\$6,568
	Multiple Victimi- zations	Cumulative program benefits	<u>\$33,143</u>					
	One Victimi- zation	Cumulative NPV	<u>\$30,982</u>					
	Multiple Victimi- zations	Cumulative benefits/dollar of cost	<u>\$15.34</u>					
	One Victimi- zation	Estimated present value cost		-\$1,928,591	-\$83,354	-\$5,884	-\$8,008	\$0

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington, 7-year follow-up

Table IV—L

Aggression Replacement Training

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses	...the Avg. # of Offenses per Offender	Expected Number of Offenses per Person				
	Estimated effect size (from research findings)	-0.180			1.117	0.900	-0.216		
Adjustments	Expected outcomes for thosewithout the program ⁽²⁾ ...with the program (from effect sizes)	45.8% 37.0%	X X	2.44 2.44	= =	1.117 0.900			
	Expected change in the number of offenses ⁽²⁾						-0.216		
	Adjustment 1: (felonies as % of total)						100.0%		
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)						66.7%		
	Without the program, the adjusted expected number of offenses per person						1.675		
	With the program, the adjusted expected number of offenses per person						1.351		
	Expected change in the long-run number of offenses, after adjustments						-0.3241		
	Percentage change						-19.3%		
		Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.
Taxpayer CJS Costs	Cost of One Future Offense	Present value cost of one offense	-\$355,086	-\$90,593	-\$92,705	-\$56,790	-\$10,898	-\$16,122	\$0
		W/O Prog., offense distribution ⁽²⁾	100%	1.29%	1.32%	7.22%	16.71%	55.03%	18.42% 0.00%
		Expected cost (PV) of one offense	-\$30,944	-\$4,591	-\$1,200	-\$6,695	-\$9,492	-\$5,997	-\$2,969 \$0
		With Prog., offense distribution	100%	1.29%	1.32%	7.22%	16.71%	55.03%	18.42% 0.00%
		Expected cost (PV) of one offense	-\$30,944	-\$4,591	-\$1,200	-\$6,695	-\$9,492	-\$5,997	-\$2,969 \$0
		Adj. 4: (Overall adjustment to cost)	0.9						
	Program Benefits and Costs	Future CJS costs without program	-\$46,646						
		Future CJS costs with program	-\$37,620						
		Future CJS costs avoided (incurred)	\$9,025						
		Incremental Treatment Cost (savings)	\$738						
Victim Monetary Costs	Sum- mary	NPV of the program	\$8,287						
		Benefits per dollar of cost	\$12.23						
		Pct. reduction to break-even	-1.6%						
	One Victimi- zation Per Offense	Estimated present value cost	-\$1,039,346	-\$6,289	-\$2,377	-\$1,475	-\$569	\$0	\$0
		Distribution of one victimization ⁽²⁾	100.00%	1.29%	1.32%	7.22%	16.71%	55.03%	18.42% 0.00%
		Expected cost, one victimization	-\$14,253	-\$13,438	-\$83	-\$172	-\$246	-\$313	\$0 \$0
		Times prog. change in offenses	\$4,619						
		Cumulative program benefits	\$13,644						
		Cumulative NPV	\$12,907						
		Cumulative benefits/dollar of cost	\$18.49						
Vic. Quality of Life Costs	Multiple Victimi- zations Per Offense	Dist. of multiple victimizations	100%	0.008%	0.07%	0.41%	0.62%	11.66%	87.23% 0.00%
		Lambda per official offense	168.91						
		Expected vict. cost, one offense	-\$28,742	-\$13,559	-\$779	-\$1,642	-\$1,547	-\$11,215	\$0 \$0
		Lambda times change in offenses	-54.74						
		Expected vict. benefits with prog.	\$9,315	\$4,394	\$253	\$532	\$501	\$3,634	\$0 \$0
		Cumulative program benefits	\$18,340						
		Cumulative NPV	\$17,602						
		Cumulative benefits/dollar of cost	\$24.86						
	One Victimi- zation	Estimated present value cost	-\$1,928,591	-\$83,354	-\$5,884	-\$8,008	\$0	\$0	\$0
		Expected cost, one victimization	-\$27,803	-\$24,936	-\$1,104	-\$425	-\$1,338	\$0	\$0
Multiple Victimi- zations		Times prog. change in offenses	\$9,010						
		Cumulative program benefits	\$22,655						
		Cumulative NPV	\$21,917						
		Cumulative benefits/dollar of cost	\$30.71						
		Expected vict. cost, one offense	-\$47,955	-\$25,161	-\$10,330	-\$4,065	-\$8,400	\$0	\$0
		Expected vict. benefits with prog.	\$15,541	\$8,154	\$3,348	\$1,317	\$2,722	\$0	\$0
		Cumulative program benefits	\$33,881						
		Cumulative NPV	\$33,143						
		Cumulative benefits/dollar of cost	\$45.92						

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington, 7-year follow-up

Table IV—L

Multidimensional Treatment Foster Care

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person	
	Estimated effect size (from research findings)	-0.370		-0.034				
	Expected outcomes for those ...							
	...without the program ⁽²⁾	60.0%	X	2.93	=	1.760		
	...with the program (from effect sizes)	41.6%	X	2.86	=	<u>1.188</u>		
	Expected change in the number of offenses ⁽²⁾					<u>-0.572</u>		
Adjustments	Adjustment 1: (felonies as % of total)					100.0%		
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)					66.7%		
	Without the program, the adjusted expected number of offenses per person					2.641		
	With the program, the adjusted expected number of offenses per person					<u>1.783</u>		
	Expected change in the long-run number of offenses, after adjustments					-0.8577		
	Percentage change					-32.5%		
Taxpayer CJS Costs	Cost of One Future Offense	Total	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.
		-\$355,086	-\$90,593	-\$92,705	-\$56,790	-\$10,898	-\$16,122	\$0
		W/O Prog., offense distribution ⁽²⁾	100%	1.29%	1.32%	7.22%	16.71%	55.03% 18.42% 0.00%
		Expected cost (PV) of one offense	<u>-\$30,944</u>	-\$4,591	-\$1,200	-\$6,695	-\$9,492	-\$5,997 -\$2,969 \$0
		With Prog., offense distribution	100%	1.29%	1.32%	7.22%	16.71%	55.03% 18.42% 0.00%
	Program Benefits and Costs	Expected cost (PV) of one offense	<u>-\$30,944</u>	-\$4,591	-\$1,200	-\$6,695	-\$9,492	-\$5,997 -\$2,969 \$0
		Adj. 4: (Overall adjustment to cost)	<u>0.9</u>					
		Future CJS costs without program	-\$73,537					
		Future CJS costs with program	<u>-\$49,649</u>					
	Future CJS costs avoided (incurred)		<u>\$23,888</u>					
Victim Monetary Costs	Incremental Treatment Cost (savings)		<u>\$2,052</u>					
	One Victimization Per Offense	NPV of the program	<u>\$21,836</u>					
		Benefits per dollar of cost	<u>\$11.64</u>					
		Pct. reduction to break-even	-2.8%					
		Estimated present value cost						
	Multiple Victimization Per Offense	Distribution of one victimization ⁽²⁾	100.00%	1.29%	1.32%	7.22%	16.71%	55.03% 18.42% 0.00%
		Expected cost, one victimization	<u>-\$14,253</u>	-\$13,438	-\$83	-\$172	-\$246	-\$313 \$0 \$0
		Times prog. change in offenses	<u>\$12,226</u>					
		Cumulative program benefits	<u>\$36,113</u>					
		Cumulative NPV	<u>\$34,061</u>					
Vic. Quality of Life Costs		Cumulative benefits/dollar of cost	<u>\$17.60</u>					
One Victimization	Dist. of multiple victimizations	100%	0.008%	0.07%	0.41%	0.62%	11.66% 87.23% 0.00%	
	Lambda per official offense	168.91						
	Expected vict. cost, one offense	<u>-\$28,742</u>	-\$13,559	-\$779	-\$1,642	-\$1,547	-\$11,215 \$0 \$0	
	Lambda times change in offenses	<u>-144.88</u>						
Multiple Victimization	Expected vict. benefits with prog.	<u>\$24,654</u>	\$11,631	\$669	\$1,408	\$1,327	\$9,619 \$0 \$0	
	Cumulative program benefits	<u>\$48,541</u>						
	Cumulative NPV	<u>\$46,489</u>						
	Cumulative benefits/dollar of cost	<u>\$23.66</u>						
	Estimated present value cost							
	One Victimization	Expected cost, one victimization	<u>-\$27,803</u>	-\$1,928,591	-\$83,354	-\$5,884	-\$8,008	\$0 \$0 \$0
		Times prog. change in offenses	<u>\$23,848</u>	-\$24,936	-\$1,104	-\$425	-\$1,338	\$0 \$0 \$0
		Cumulative program benefits	<u>\$59,962</u>					
	Multiple Victimization	Cumulative NPV	<u>\$57,910</u>					
		Cumulative benefits/dollar of cost	<u>\$29.22</u>					
		Expected vict. cost, one offense	<u>-\$47,955</u>	-\$25,161	-\$10,330	-\$4,065	-\$8,400	\$0 \$0 \$0

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington, 7-year follow-up

Table IV—L

Adolescent Diversion Project

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses	...the Avg. # of Offenses per Offender	Expected Number of Offenses per Person				
	Estimated effect size (from research findings)	-0.273			0.000	0.365	0.183		
Adjustments	Expected outcomes for those ...								
	...without the program ⁽²⁾	18.7%	X	1.95	=	0.365			
	...with the program (from effect sizes)	9.3%	X	1.95	=	<u>0.183</u>			
	Expected change in the number of offenses ⁽²⁾						-0.183		
	Adjustment 1: (felonies as % of total)						100.0%		
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)						61.6%		
	Without the program, the adjusted expected number of offenses per person						0.593		
	With the program, the adjusted expected number of offenses per person						<u>0.296</u>		
	Expected change in the long-run number of offenses, after adjustments						-0.2968		
	Percentage change						-50.1%		
		Total	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.	
Taxpayer CJS Costs	Cost of One Future Offense	Present value cost of one offense	-\$299,919	-\$80,960	-\$84,020	-\$56,288	-\$9,732	\$14,754	\$0
		W/O Prog., offense distribution ⁽²⁾	100%	1.39%	0.71%	5.63%	13.45%	59.73%	19.08% 0.00%
		Expected cost (PV) of one offense	-\$25,677	-\$4,171	-\$576	-\$4,728	-\$7,573	-\$5,813	-\$2,815 \$0
		With Prog., offense distribution	100%	1.39%	0.71%	5.63%	13.45%	59.73%	19.08% 0.00%
		Expected cost (PV) of one offense	-\$25,677	-\$4,171	-\$576	-\$4,728	-\$7,573	-\$5,813	-\$2,815 \$0
	Program Benefits and Costs	Adj. 4: (Overall adjustment to cost)	0.9						
		Future CJS costs without program	-\$13,702						
		Future CJS costs with program	<u>-\$6,844</u>						
		Future CJS costs avoided (incurred)	\$6,858						
	Sum- mary	Incremental Treatment Cost (savings)	\$1,138						
		NPV of the program	\$5,720						
		Benefits per dollar of cost	\$6.03						
Victim Monetary Costs	One Victimization Per Offense	Pct. reduction to break-even	-8.3%						
		Estimated present value cost							
		Distribution of one victimization ⁽²⁾	100.00%	1.39%	0.71%	5.63%	13.45%	59.73%	19.08% 0.00%
		Expected cost, one victimization	-\$15,204	-\$14,484	-\$45	-\$134	-\$199	-\$342	\$0 \$0
		Times prog. change in offenses	\$4,512						
	Multiple Victimization Per Offense	Cumulative program benefits	\$11,370						
		Cumulative NPV	\$10,233						
		Cumulative benefits/dollar of cost	\$9.99						
		Dist. of multiple victimizations	100%	0.008%	0.04%	0.31%	0.48%	12.18%	86.98% 0.00%
		Lambda per official offense	175.49						
Vic. Quality of Life Costs	One Victimi- zation	Expected vict. cost, one offense	-\$29,788	-\$14,615	-\$420	-\$1,282	-\$1,248	-\$12,224	\$0 \$0
		Lambda times change in offenses	-52.08						
		Expected vict. benefits with prog.	\$8,840	\$4,337	\$125	\$381	\$370	\$3,628	\$0 \$0
		Cumulative program benefits	\$15,699						
		Cumulative NPV	\$14,561						
	Multiple Victimi- zations	Cumulative benefits/dollar of cost	\$13.80						
		Estimated present value cost							
		Expected cost, one victimization	-\$28,883	-\$1,932,645	-\$83,529	-\$5,897	-\$8,025	\$0	\$0 \$0
		Times prog. change in offenses	\$8,572	-\$26,877	-\$594	-\$332	-\$1,080	\$0	\$0 \$0
		Cumulative program benefits	\$19,942						

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington, 7-year follow-up

Table IV—L

Diversion with Services (vs. Regular Juvenile Court Processing)

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person		
	Estimated effect size (from research findings)	-0.048			0.000				
	Expected outcomes for those ...								
	...without the program ⁽²⁾		18.7%	X	1.95	=	0.365		
	...with the program (from effect sizes)		16.9%	X	1.95	=	<u>0.330</u>		
	Expected change in the number of offenses ⁽²⁾						-0.036		
Adjustments	Adjustment 1: (felonies as % of total)						100.0%		
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)						61.6%		
	Without the program, the adjusted expected number of offenses per person						0.593		
	With the program, the adjusted expected number of offenses per person						<u>0.535</u>		
	Expected change in the long-run number of offenses, after adjustments						-0.0581		
	Percentage change						-9.8%		
Taxpayer CJS Costs	Cost of One Future Offense	Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug Misd.	
		Present value cost of one offense		-\$299,919	-\$80,960	-\$84,020	-\$56,288	-\$9,732	\$14,754
		W/O Prog., offense distribution ⁽²⁾	100%		1.39%	0.71%	5.63%	13.45%	59.73% 19.08% 0.00%
		Expected cost (PV) of one offense	-\$25,677		-\$4,171	-\$576	-\$4,728	-\$7,573	-\$5,813 -\$2,815 \$0
		With Prog., offense distribution	100%		1.39%	0.71%	5.63%	13.45%	59.73% 19.08% 0.00%
	Program Benefits and Costs	Expected cost (PV) of one offense	-\$25,677		-\$4,171	-\$576	-\$4,728	-\$7,573	-\$5,813 -\$2,815 \$0
		Adj. 4: (Overall adjustment to cost)	0.9						
		Future CJS costs without program	-\$13,702						
		Future CJS costs with program	-\$12,359						
	Future CJS costs avoided (incurred)		\$1,343						
Victim Monetary Costs	Incremental Treatment Cost (savings)		-\$127						
	One Victimization Per Offense	NPV of the program	\$1,470						
		Benefits per dollar of cost	n/a						
		Pct. reduction to break-even	0.9%						
		Estimated present value cost							
	Multiple Victimization Per Offense	Distribution of one victimization ⁽²⁾	100.00%		1.39%	0.71%	5.63%	13.45%	59.73% 19.08% 0.00%
		Expected cost, one victimization	-\$15,204		-\$14,484	-\$45	-\$134	-\$199	-\$342 \$0 \$0
		Times prog. change in offenses	\$884						
		Cumulative program benefits	\$2,227						
		Cumulative NPV	\$2,353						
Vic. Quality of Life Costs		Cumulative benefits/dollar of cost	n/a						
One Victimization	Dist. of multiple victimizations	100%		0.008%	0.04%	0.31%	0.48%	12.18% 86.98% 0.00%	
	Lambda per official offense	175.49							
	Expected vict. cost, one offense	-\$29,788		-\$14,615	-\$420	-\$1,282	-\$1,248	-\$12,224 \$0 \$0	
	Lambda times change in offenses	-10.20							
Multiple Victimization	Expected vict. benefits with prog.	\$1,731		\$849	\$24	\$75	\$73	\$710 \$0 \$0	
	Cumulative program benefits	\$3,074							
	Cumulative NPV	\$3,201							
	Cumulative benefits/dollar of cost	n/a							
	Estimated present value cost								
Multiple Victimization	One Victimization	Expected cost, one victimization	-\$28,883		-\$1,932,645	-\$83,529	-\$5,897	-\$8,025	\$0 \$0 \$0
		Times prog. change in offenses	\$1,679		-\$26,877	-\$594	-\$332	-\$1,080	\$0 \$0 \$0
		Cumulative program benefits	\$3,905						
		Cumulative NPV	\$4,032						
		Cumulative benefits/dollar of cost	n/a						

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington, 7-year follow-up

Table IV—L

Juvenile Court Intensive Probation (as enhancement to regular probation)

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses	...the Avg. # of Offenses per Offender	Expected Number of Offenses per Person				
	Estimated effect size (from research findings)	-0.048							
	Expected outcomes for those ...								
	...without the program ⁽²⁾	45.8%	X	2.44	= 1.117				
	...with the program (from effect sizes)	43.5%	X	2.44	= <u>1.059</u>				
	Expected change in the number of offenses ⁽²⁾				-0.058				
Adjustments	Adjustment 1: (felonies as % of total)				100.0%				
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)				66.7%				
	Without the program, the adjusted expected number of offenses per person				1.675				
	With the program, the adjusted expected number of offenses per person				<u>1.588</u>				
	Expected change in the long-run number of offenses, after adjustments				-0.0865				
	Percentage change				-5.2%				
		Total	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.	
Taxpayer CJS Costs	Cost of One Future Offense	Present value cost of one offense	-\$355,086	-\$90,593	-\$92,705	-\$56,790	-\$10,898	-\$16,122	\$0
		W/O Prog., offense distribution ⁽²⁾	100%	1.29%	1.32%	7.22%	16.71%	55.03%	18.42% 0.00%
		Expected cost (PV) of one offense	-\$30,944	-\$4,591	-\$1,200	-\$6,695	-\$9,492	-\$5,997	-\$2,969 \$0
		With Prog., offense distribution	100%	1.29%	1.32%	7.22%	16.71%	55.03%	18.42% 0.00%
		Expected cost (PV) of one offense	-\$30,944	-\$4,591	-\$1,200	-\$6,695	-\$9,492	-\$5,997	-\$2,969 \$0
	Program Benefits and Costs	Adj. 4: (Overall adjustment to cost)	0.9						
		Future CJS costs without program	-\$46,646						
		Future CJS costs with program	-\$44,236						
		Future CJS costs avoided (incurred)	\$2,410						
		Incremental Treatment Cost (savings)	\$2,234						
Victim Monetary Costs	One Victimization Per Offense	NPV of the program	\$176						
		Benefits per dollar of cost	\$1.08						
		Pct. reduction to break-even	-4.8%						
		Estimated present value cost							
		Distribution of one victimization ⁽²⁾	100.00%	1.29%	1.32%	7.22%	16.71%	55.03%	18.42% 0.00%
	Multiple Victimization Per Offense	Expected cost, one victimization	-\$14,253	-\$13,438	-\$83	-\$172	-\$246	-\$313	\$0 \$0
		Times prog. change in offenses	\$1,233						
		Cumulative program benefits	\$3,643						
		Cumulative NPV	\$1,409						
		Cumulative benefits/dollar of cost	\$1.63						
Vic. Quality of Life Costs	One Victimization	Dist. of multiple victimizations	100%	0.008%	0.07%	0.41%	0.62%	11.66%	87.23% 0.00%
		Lambda per official offense	168.91						
		Expected vict. cost, one offense	-\$28,742	-\$13,559	-\$779	-\$1,642	-\$1,547	-\$11,215	\$0 \$0
		Lambda times change in offenses	-14.62						
		Expected vict. benefits with prog.	\$2,487	\$1,173	\$67	\$142	\$134	\$970	\$0 \$0
	Multiple Victimization	Cumulative program benefits	\$4,897						
		Cumulative NPV	\$2,663						
		Cumulative benefits/dollar of cost	\$2.19						
		Estimated present value cost							
		Expected cost, one victimization	-\$27,803	-\$1,928,591	-\$83,354	-\$5,884	-\$8,008	\$0	\$0 \$0

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington, 7-year follow-up

Table IV—L

Juvenile Court Intensive Probation (as alternative to incarceration)

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person	
	Estimated effect size (from research findings)	-0.002			0.000			
	Expected outcomes for those ...							
	...without the program ⁽²⁾	60.0%	X	2.93	=	1.760		
	...with the program (from effect sizes)	59.9%	X	2.93	=	1.758		
	Expected change in the number of offenses ⁽²⁾						-0.002	
Adjustments	Adjustment 1: (felonies as % of total)						100.0%	
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)						71.5%	
	Without the program, the adjusted expected number of offenses per person						2.462	
	With the program, the adjusted expected number of offenses per person						2.458	
	Expected change in the long-run number of offenses, after adjustments						-0.0035	
	Percentage change						-0.1%	
Taxpayer CJS Costs	Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.
	Cost of One Future Offense	Present value cost of one offense	-\$428,237	-\$103,407	-\$104,275	-\$57,531	-\$12,620	-\$17,946
	W/O Prog., offense distribution ⁽²⁾	100%	1.29%	1.32%	7.22%	16.71%	55.03%	18.42% 0.00%
	Expected cost (PV) of one offense	-\$34,303	-\$5,537	-\$1,370	-\$7,530	-\$9,616	-\$6,945	-\$3,305 \$0
	With Prog., offense distribution	100%	1.29%	1.32%	7.22%	16.71%	55.03%	18.42% 0.00%
	Expected cost (PV) of one offense	-\$34,303	-\$5,537	-\$1,370	-\$7,530	-\$9,616	-\$6,945	-\$3,305 \$0
	Adj. 4: (Overall adjustment to cost)	0.9						
	Program Benefits and Costs	Future CJS costs without program	-\$76,002					
		Future CJS costs with program	-\$75,894					
		Future CJS costs avoided (incurred)	\$108					
Victim Monetary Costs	Sum- mary	Incremental Treatment Cost (savings)	-\$18,478					
		NPV of the program	\$18,586					
		Benefits per dollar of cost	n/a					
		Pct. reduction to break-even	24.3%					
Victimizations Per Offense	Estimated present value cost		-\$1,037,960	-\$6,281	-\$2,374	-\$1,473	-\$567	\$0 \$0
	Distribution of one victimization ⁽²⁾	100.00%	1.29%	1.32%	7.22%	16.71%	55.03%	18.42% 0.00%
	Expected cost, one victimization	-\$14,234	-\$13,420	-\$83	-\$171	-\$246	-\$312	\$0 \$0
	Times prog. change in offenses	\$50						
	Cumulative program benefits	\$158						
	Cumulative NPV	\$18,636						
	Cumulative benefits/dollar of cost	n/a						
	Multiple Victimi- zations Per Offense	Dist. of multiple victimizations	100%	0.008%	0.07%	0.41%	0.62%	11.66% 87.23% 0.00%
		Lambda per official offense	168.91					
		Expected vict. cost, one offense	-\$28,680	-\$13,541	-\$778	-\$1,640	-\$1,545	-\$11,176 \$0 \$0
Vic. Quality of Life Costs	One Victimi- zation	Lambda times change in offenses	-0.59					
		Expected vict. benefits with prog.	\$100	\$47	\$3	\$6	\$5	\$39 \$0 \$0
		Cumulative program benefits	\$208					
		Cumulative NPV	\$18,686					
		Cumulative benefits/dollar of cost	n/a					
Multiple Victimi- zations	Estimated present value cost		-\$1,926,020	-\$83,243	-\$5,876	-\$7,997	\$0	\$0 \$0
	Expected cost, one victimization	-\$27,766	-\$24,903	-\$1,103	-\$424	-\$1,337	\$0	\$0 \$0
	Times prog. change in offenses	\$97						
	Cumulative program benefits	\$255						
	Cumulative NPV	\$18,733						
	Cumulative benefits/dollar of cost	n/a						

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington, 7-year follow-up

Table IV—L

Juvenile Intensive Parole Supervision (as enhancement to regular parole)									
Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person		
	Estimated effect size (from research findings)		-0.040		0.000				
Adjustments	Expected outcomes for those ...								
	...without the program ⁽²⁾	60.0%	X	2.93	=	1.760			
	...with the program (from effect sizes)	58.0%	X	2.93	=	<u>1.702</u>			
	Expected change in the number of offenses ⁽²⁾					<u>-0.058</u>			
	Adjustment 1: (felonies as % of total)						100.0%		
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)						71.5%		
	Without the program, the adjusted expected number of offenses per person						2.462		
	With the program, the adjusted expected number of offenses per person						<u>2.380</u>		
	Expected change in the long-run number of offenses, after adjustments						<u>-0.0816</u>		
	Percentage change						-3.3%		
Taxpayer CJS Costs	Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.	
	Cost of One Future Offense	Present value cost of one offense	-\$428,237	-\$103,407	-\$104,275	-\$57,531	-\$12,620	-\$17,946	\$0
	W/O Prog., offense distribution ⁽²⁾	100%	1.29%	1.32%	7.22%	16.71%	55.03%	18.42%	0.00%
	Expected cost (PV) of one offense	<u>-\$34,303</u>	-\$5,537	-\$1,370	-\$7,530	-\$9,616	-\$6,945	-\$3,305	\$0
	With Prog., offense distribution	100%	1.29%	1.32%	7.22%	16.71%	55.03%	18.42%	0.00%
	Expected cost (PV) of one offense	<u>-\$34,303</u>	-\$5,537	-\$1,370	-\$7,530	-\$9,616	-\$6,945	-\$3,305	\$0
	Adj. 4: (Overall adjustment to cost)	<u>0.9</u>							
	Program Benefits and Costs	Future CJS costs without program	-\$76,002						
	Future CJS costs with program	<u>-\$73,484</u>							
Victim Monetary Costs	Sum- mary	Future CJS costs avoided (incurred)	<u>\$2,518</u>						
	Incremental Treatment Cost (savings)	<u>\$2,635</u>							
	One Victim- ization Per Offense	NPV of the program	<u>-\$117</u>						
	Benefits per dollar of cost	<u>\$0.96</u>							
	Pct. reduction to break-even	<u>-3.5%</u>							
	Estimated present value cost								
	Distribution of one victimization ⁽²⁾	100.00%	1.29%	1.32%	7.22%	16.71%	55.03%	18.42%	0.00%
	Expected cost, one victimization	<u>-\$14,234</u>	-\$13,420	-\$83	-\$171	-\$246	-\$312	\$0	\$0
	Times prog. change in offenses	<u>\$1,161</u>							
Vic. Quality of Life Costs	Multiple Victimi- zations Per Offense	Cumulative program benefits	<u>\$3,679</u>						
	Cumulative NPV	<u>\$1,044</u>							
	Cumulative benefits/dollar of cost	<u>\$1.40</u>							
	Dist. of multiple victimizations	100%	0.008%	0.07%	0.41%	0.62%	11.66%	87.23%	0.00%
	Lambda per official offense	168.91							
	Expected vict. cost, one offense	<u>-\$28,680</u>	-\$13,541	-\$778	-\$1,640	-\$1,545	-\$11,176	\$0	\$0
	Lambda times change in offenses	<u>-13.78</u>							
	Expected vict. benefits with prog.	<u>\$2,339</u>	\$1,104	\$63	\$134	\$126	\$911	\$0	\$0
	Cumulative program benefits	<u>\$4,857</u>							
	Cumulative NPV	<u>\$2,222</u>							
	Cumulative benefits/dollar of cost	<u>\$1.84</u>							
Multiple Victimi- zations	One Victimi- zation	Estimated present value cost							
	Expected cost, one victimization	<u>-\$27,766</u>	-\$1,926,020	-\$83,243	-\$5,876	-\$7,997	\$0	\$0	\$0
	Times prog. change in offenses	<u>\$2,264</u>	-\$24,903	-\$1,103	-\$424	-\$1,337	\$0	\$0	\$0
	Cumulative program benefits	<u>\$5,943</u>							
	Cumulative NPV	<u>\$3,308</u>							
	Cumulative benefits/dollar of cost	<u>\$2.26</u>							
(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.	Expected vict. cost, one offense	<u>-\$47,891</u>	-\$25,127	-\$10,316	-\$4,059	-\$8,388	\$0	\$0	\$0
	Expected vict. benefits with prog.	<u>\$3,906</u>	\$2,049	\$841	\$331	\$684	\$0	\$0	\$0
	Cumulative program benefits	<u>\$8,763</u>							
	Cumulative NPV	<u>\$6,128</u>							
	Cumulative benefits/dollar of cost	<u>\$3.33</u>							

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington, 7-year follow-up

Table IV—L

Coordinated Services

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person	
	Estimated effect size (from research findings)	-0.139		0.000				
Adjustments	Expected outcomes for thosewithout the program ⁽²⁾ ...with the program (from effect sizes)	18.7% 13.6%	X X	1.95 1.95	= =	0.365 <u>0.266</u>	<u>0.266</u> -0.100	
	Expected change in the number of offenses ⁽²⁾							
	Adjustment 1: (felonies as % of total)						100.0%	
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)						61.6%	
	Without the program, the adjusted expected number of offenses per person						0.593	
	With the program, the adjusted expected number of offenses per person						<u>0.431</u>	
	Expected change in the long-run number of offenses, after adjustments						-0.1616	
	Percentage change						-27.2%	
Taxpayer CJS Costs	Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.
	Cost of One Future Offense							
	Present value cost of one offense	-\$299,919	-\$80,960	-\$84,020	-\$56,288	-\$9,732	\$14,754	\$0
	W/O Prog., offense distribution ⁽²⁾	100%	1.39%	0.71%	5.63%	13.45%	59.73%	19.08% 0.00%
	Expected cost (PV) of one offense	<u>-\$25,677</u>	<u>-\$4,171</u>	<u>-\$576</u>	<u>-\$4,728</u>	<u>-\$7,573</u>	<u>-\$5,813</u>	<u>-\$2,815</u> \$0
	With Prog., offense distribution	100%	1.39%	0.71%	5.63%	13.45%	59.73%	19.08% 0.00%
	Expected cost (PV) of one offense	<u>-\$25,677</u>	<u>-\$4,171</u>	<u>-\$576</u>	<u>-\$4,728</u>	<u>-\$7,573</u>	<u>-\$5,813</u>	<u>-\$2,815</u> \$0
	Adj. 4: (Overall adjustment to cost)	<u>0.9</u>						
	Program Benefits and Costs							
	Future CJS costs without program	-\$13,702						
	Future CJS costs with program	<u>-\$9,969</u>						
	Future CJS costs avoided (incurred)	<u>\$3,734</u>						
	Incremental Treatment Cost (savings)	\$603						
	Sum- mary							
	NPV of the program	<u>\$3,131</u>						
	Benefits per dollar of cost	<u>\$6.20</u>						
	Pct. reduction to break-even	<u>-4.4%</u>						
Victim Monetary Costs	One Victimi- zation Per Offense							
	Estimated present value cost							
	Distribution of one victimization ⁽²⁾	100.00%	1.39%	0.71%	5.63%	13.45%	59.73%	19.08% 0.00%
	Expected cost, one victimization	<u>-\$15,204</u>	<u>-\$14,484</u>	<u>-\$45</u>	<u>-\$134</u>	<u>-\$199</u>	<u>-\$342</u>	<u>\$0</u> \$0
	Times prog. change in offenses	\$2,456						
	Cumulative program benefits	\$6,190						
	Cumulative NPV	<u>\$5,587</u>						
	Cumulative benefits/dollar of cost	<u>\$10.27</u>						
	Multiple Victimi- zations Per Offense							
	Dist. of multiple victimizations	100%	0.008%	0.04%	0.31%	0.48%	12.18%	86.98% 0.00%
	Lambda per official offense	175.49						
	Expected vict. cost, one offense	<u>-\$29,788</u>	<u>-\$14,615</u>	<u>-\$420</u>	<u>-\$1,282</u>	<u>-\$1,248</u>	<u>-\$12,224</u>	<u>\$0</u> \$0
	Lambda times change in offenses	-28.35						
	Expected vict. benefits with prog.	\$4,813						
	Cumulative program benefits	\$8,546						
	Cumulative NPV	<u>\$7,944</u>						
	Cumulative benefits/dollar of cost	<u>\$14.18</u>						
Vic. Quality of Life Costs	One Victimi- zation							
	Estimated present value cost							
	Expected cost, one victimization	<u>-\$28,883</u>	<u>-\$1,932,645</u>	<u>-\$83,529</u>	<u>-\$5,897</u>	<u>-\$8,025</u>	<u>\$0</u>	<u>\$0</u> \$0
	Times prog. change in offenses	\$4,666						
	Cumulative program benefits	\$10,856						
	Cumulative NPV	<u>\$10,253</u>						
	Cumulative benefits/dollar of cost	<u>\$18.02</u>						
	Multiple Victimi- zations							
	Expected vict. cost, one offense	<u>-\$42,629</u>	<u>-\$27,119</u>	<u>-\$5,561</u>	<u>-\$3,174</u>	<u>-\$6,776</u>	<u>\$0</u>	<u>\$0</u> \$0
	Expected vict. benefits with prog.	<u>\$6,887</u>	<u>\$4,381</u>	<u>\$898</u>	<u>\$513</u>	<u>\$1,095</u>	<u>\$0</u>	<u>\$0</u> \$0
	Cumulative program benefits	<u>\$15,433</u>						
	Cumulative NPV	<u>\$14,831</u>						
	Cumulative benefits/dollar of cost	<u>\$25.61</u>						

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington, 7-year follow-up

Table IV—L
Scared Straight Type Programs

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses	...the Avg. # of Offenses per Offender	Expected Number of Offenses per Person			
	Estimated effect size (from research findings)	0.128						
	Expected outcomes for those ...							
	...without the program ⁽²⁾	45.8%	X	2.44	=	1.117		
	...with the program (from effect sizes)	52.3%	X	2.44	=	<u>1.273</u>		
	Expected change in the number of offenses ⁽²⁾					0.156		
Adjustments	Adjustment 1: (felonies as % of total)					100.0%		
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)					66.7%		
	Without the program, the adjusted expected number of offenses per person					1.675		
	With the program, the adjusted expected number of offenses per person					<u>1.909</u>		
	Expected change in the long-run number of offenses, after adjustments					0.2342		
	Percentage change					14.0%		
Taxpayer CJS Costs	Cost of One Future Offense	Total	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.
		-\$355,086	-\$90,593	-\$92,705	-\$56,790	-\$10,898	-\$16,122	\$0
		W/O Prog., offense distribution ⁽²⁾	100%	1.29%	1.32%	7.22%	16.71%	55.03%
		Expected cost (PV) of one offense	-\$30,944	-\$4,591	-\$1,200	-\$6,695	-\$9,492	-\$5,997
		With Prog., offense distribution	100%	1.29%	1.32%	7.22%	16.71%	55.03%
		Expected cost (PV) of one offense	-\$30,944	-\$4,591	-\$1,200	-\$6,695	-\$9,492	-\$5,997
		Adj. 4: (Overall adjustment to cost)	0.9					
	Program Benefits and Costs	Future CJS costs without program	-\$46,646					
		Future CJS costs with program	-\$53,167					
		Future CJS costs avoided (incurred)	-\$6,521					
		Incremental Treatment Cost (savings)	\$51					
Victim Monetary Costs	One Victimization Per Offense	NPV of the program	-\$6,572					
		Benefits per dollar of cost	-\$127.26					
		Pct. reducton to break-even	-0.1%					
		Estimated present value cost						
		Distribution of one victimization ⁽²⁾	100.00%					
	Multiple Victimization Per Offense	Expected cost, one victimization	-\$14,253	1.29%	1.32%	7.22%	16.71%	55.03%
		Times prog. change in offenses	-\$3,337					
		Cumulative program benefits	-\$9,858					
		Cumulative NPV	-\$9,910					
		Cumulative benefits/dollar of cost	-\$192.40					
Vic. Quality of Life Costs	One Victimization	Dist. of multiple victimizations	100%	0.008%	0.07%	0.41%	0.62%	11.66%
		Lambda per official offense	168.91					87.23%
		Expected vict. cost, one offense	-\$28,742	-\$13,559	-\$779	-\$1,642	-\$1,547	-\$11,215
		Lambda times change in offenses	39.55					\$0
		Expected vict. benefits with prog.	-\$6,730	-\$3,175	-\$182	-\$384	-\$362	-\$2,626
	Multiple Victimization	Cumulative program benefits	-\$13,251					
		Cumulative NPV	-\$13,302					
		Cumulative benefits/dollar of cost	-\$258.61					
		Estimated present value cost						
		Expected cost, one victimization	-\$27,803	-\$1,928,591	-\$83,354	-\$5,884	-\$8,008	\$0

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington, 7-year follow-up

Table IV—L

Other Family-Based Therapy Approaches

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person			
	Estimated effect size (from research findings)	-0.173	0.000							
Expected outcomes for those ...										
...without the program ⁽²⁾	45.8%	X	2.44	=	1.117					
...with the program (from effect sizes)	37.3%	X	2.44	=	0.909					
Expected change in the number of offenses ⁽²⁾							-0.207			
Adjustments	Adjustment 1: (felonies as % of total)						100.0%			
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)						66.7%			
	Without the program, the adjusted expected number of offenses per person						1.675			
	With the program, the adjusted expected number of offenses per person						1.364			
	Expected change in the long-run number of offenses, after adjustments						-0.3106			
	Percentage change						-18.5%			
		Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.	
Taxpayer CJS Costs	Cost of One Future Offense	Present value cost of one offense	-\$355,086	-\$90,593	-\$92,705	-\$56,790	-\$10,898	-\$16,122	\$0	
	W/O Prog., offense distribution ⁽²⁾	100%	1.29%	1.32%	7.22%	16.71%	55.03%	18.42%	0.00%	
	Expected cost (PV) of one offense	-\$30,944	-\$4,591	-\$1,200	-\$6,695	-\$9,492	-\$5,997	-\$2,969	\$0	
	With Prog., offense distribution	100%	1.29%	1.32%	7.22%	16.71%	55.03%	18.42%	0.00%	
	Expected cost (PV) of one offense	-\$30,944	-\$4,591	-\$1,200	-\$6,695	-\$9,492	-\$5,997	-\$2,969	\$0	
	Adj. 4: (Overall adjustment to cost)	0.9								
	Program Benefits and Costs	Future CJS costs without program	-\$46,646							
		Future CJS costs with program	-\$37,995							
		Future CJS costs avoided (incurred)	\$8,650							
	Sum- mary	Incremental Treatment Cost (savings)	\$1,537							
		NPV of the program	\$7,113							
		Benefits per dollar of cost	\$5.63							
		Pct. reduction to break-even	-3.3%							
Victim Monetary Costs	One Victim- ization Per Offense	Estimated present value cost	-\$1,039,346	-\$6,289	-\$2,377	-\$1,475	-\$569	\$0	\$0	
		Distribution of one victimization ⁽²⁾	100.00%	1.29%	1.32%	7.22%	16.71%	55.03%	18.42%	0.00%
		Expected cost, one victimization	-\$14,253	-\$13,438	-\$83	-\$172	-\$246	-\$313	\$0	\$0
		Times prog. change in offenses	\$4,427							
		Cumulative program benefits	\$13,077							
		Cumulative NPV	\$11,540							
		Cumulative benefits/dollar of cost	\$8.51							
	Multiple Victimi- zations Per Offense	Dist. of multiple victimizations	100%	0.008%	0.07%	0.41%	0.62%	11.66%	87.23%	0.00%
		Lambda per official offense	168.91							
		Expected vict. cost, one offense	-\$28,742	-\$13,559	-\$779	-\$1,642	-\$1,547	-\$11,215	\$0	\$0
		Lambda times change in offenses	-52.46							
		Expected vict. benefits with prog.	\$8,928	\$4,212	\$242	\$510	\$480	\$3,483	\$0	\$0
		Cumulative program benefits	\$17,578							
		Cumulative NPV	\$16,041							
		Cumulative benefits/dollar of cost	\$11.43							
Vic. Quality of Life Costs	One Victimi- zation	Estimated present value cost	-\$1,928,591	-\$83,354	-\$5,884	-\$8,008	\$0	\$0	\$0	
		Expected cost, one victimization	-\$27,803	-\$24,936	-\$1,104	-\$425	-\$1,338	\$0	\$0	\$0
		Times prog. change in offenses	\$8,636							
		Cumulative program benefits	\$21,713							
		Cumulative NPV	\$20,176							
		Cumulative benefits/dollar of cost	\$14.13							
	Multiple Victimi- zations	Expected vict. cost, one offense	-\$47,955	-\$25,161	-\$10,330	-\$4,065	-\$8,400	\$0	\$0	\$0
		Expected vict. benefits with prog.	\$14,895	\$7,815	\$3,208	\$1,263	\$2,609	\$0	\$0	\$0
		Cumulative program benefits	\$32,473							
		Cumulative NPV	\$30,936							
		Cumulative benefits/dollar of cost	\$21.12							

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington, 7-year follow-up

Table IV—L

Juvenile Sex Offender Treatment—Primarily Cognitive-Behavioral

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person	
	Estimated effect size (from research findings)	-0.123			0.000			
	Expected outcomes for those ...							
	...without the program ⁽²⁾	46.0%	X	2.53	=	1.165		
	...with the program (from effect sizes)	39.9%	X	2.53	=	<u>1.011</u>		
	Expected change in the number of offenses ⁽²⁾						<u>-0.155</u>	
Adjustments	Adjustment 1: (felonies as % of total)						100.0%	
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)						66.7%	
	Without the program, the adjusted expected number of offenses per person						1.748	
	With the program, the adjusted expected number of offenses per person						<u>1.516</u>	
	Expected change in the long-run number of offenses, after adjustments						<u>-0.2319</u>	
	Percentage change						-13.3%	
		Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug Misd.
Taxpayer CJS Costs	Cost of One Future Offense	Present value cost of one offense	-\$355,086	-\$90,593	-\$92,705	-\$56,790	-\$10,898	-\$16,122
		W/O Prog., offense distribution ⁽²⁾	100%	1.25%	6.25%	8.75%	10.00%	61.25%
		Expected cost (PV) of one offense	<u>-\$32,581</u>	-\$4,439	-\$5,662	-\$8,112	-\$5,679	-\$6,675
		With Prog., offense distribution	100%	1.25%	6.25%	8.75%	10.00%	61.25%
		Expected cost (PV) of one offense	<u>-\$32,581</u>	-\$4,439	-\$5,662	-\$8,112	-\$5,679	-\$6,675
	Program Benefits and Costs	Adj. 4: (Overall adjustment to cost)	0.9					
		Future CJS costs without program	-\$51,267					
		Future CJS costs with program	<u>-\$44,466</u>					
		Future CJS costs avoided (incurred)	\$6,801					
		Incremental Treatment Cost (savings)	\$9,920					
Victim Monetary Costs	One Victimization Per Offense	NPV of the program	-\$3,119					
		Benefits per dollar of cost	\$0.69					
		Pct. reduction to break-even	-19.3%					
		Estimated present value cost						
		Distribution of one victimization ⁽²⁾	100.00%	1.25%	6.25%	8.75%	10.00%	61.25%
	Multiple Victimization Per Offense	Expected cost, one victimization	-\$14,089					
		Times prog. change in offenses	\$3,268					
		Cumulative program benefits	\$10,069					
		Cumulative NPV	\$149					
		Cumulative benefits/dollar of cost	\$1.02					
Vic. Quality of Life Costs	One Victimization	Dist. of multiple victimizations	100%	0.010%	0.47%	0.68%	0.51%	17.68%
		Lambda per official offense	123.98					
		Expected vict. cost, one offense	-\$32,184	-\$13,109	-\$3,678	-\$1,989	-\$925	-\$12,482
		Lambda times change in offenses	-28.76					
		Expected vict. benefits with prog.	\$7,465					
	Multiple Victimization	Cumulative program benefits	\$14,266	\$3,041	\$853	\$461	\$215	\$2,895
		Cumulative NPV	\$4,346					
		Cumulative benefits/dollar of cost	\$1.44					
		Estimated present value cost						
		Expected cost, one victimization	-\$30,633	-\$1,928,591	-\$83,354	-\$5,884	-\$8,008	\$0
	Multiple Victimization	Times prog. change in offenses	\$7,105	-\$24,107	-\$5,210	-\$515	-\$801	\$0
		Cumulative program benefits	\$17,174					
		Cumulative NPV	\$7,254					
		Cumulative benefits/dollar of cost	\$1.73					
		Expected vict. cost, one offense	-\$83,018					

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington, 7-year follow-up

Table IV—L

Juvenile Boot Camps

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses	...the Avg. # of Offenses per Offender	Expected Number of Offenses per Person				
	Estimated effect size (from research findings)	0.100							
	Expected outcomes for those ...								
	...without the program ⁽²⁾	45.8%	X	2.44	=	1.117			
	...with the program (from effect sizes)	50.8%	X	2.44	=	1.238			
	Expected change in the number of offenses ⁽²⁾					0.121			
Adjustments	Adjustment 1: (felonies as % of total)					100.0%			
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)					66.7%			
	Without the program, the adjusted expected number of offenses per person					1.675			
	With the program, the adjusted expected number of offenses per person					1.857			
	Expected change in the long-run number of offenses, after adjustments					0.1818			
	Percentage change					10.9%			
Taxpayer CJS Costs	Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.	
	Cost of One Future Offense	Present value cost of one offense	-\$355,086	-\$90,593	-\$92,705	-\$56,790	-\$10,898	-\$16,122	\$0
	Program Benefits and Costs	W/O Prog., offense distribution ⁽²⁾	100%	1.29%	1.32%	7.22%	16.71%	55.03%	18.42% 0.00%
	Sum- mary	Expected cost (PV) of one offense	-\$30,944	-\$4,591	-\$1,200	-\$6,695	-\$9,492	-\$5,997	-\$2,969 \$0
	One Victimi- zation Per Offense	With Prog., offense distribution	100%	1.29%	1.32%	7.22%	16.71%	55.03%	18.42% 0.00%
	Multiple Victimi- zations Per Offense	Expected cost (PV) of one offense	-\$30,944	-\$4,591	-\$1,200	-\$6,695	-\$9,492	-\$5,997	-\$2,969 \$0
	One Victimi- zation	Adj. 4: (Overall adjustment to cost)	0.9						
	Multiple Victimi- zations	Future CJS costs without program	-\$46,646						
	One Victimi- zation	Future CJS costs with program	-\$51,710						
	Multiple Victimi- zations	Future CJS costs avoided (incurred)	-\$5,064						
Victim Monetary Costs	One Victimi- zation Per Offense	Incremental Treatment Cost (savings)	-\$15,424						
	Sum- mary	NPV of the program	\$10,360						
	One Victimi- zation	Benefits per dollar of cost	\$3.05						
	Multiple Victimi- zations	Pct. reduction to break-even	33.1%						
	One Victimi- zation	Estimated present value cost		-\$1,039,346	-\$6,289	-\$2,377	-\$1,475	-\$569	\$0 \$0
	Multiple Victimi- zations	Distribution of one victimization ⁽²⁾	100.00%	1.29%	1.32%	7.22%	16.71%	55.03%	18.42% 0.00%
	One Victimi- zation	Expected cost, one victimization	-\$14,253	-\$13,438	-\$83	-\$172	-\$246	-\$313	\$0 \$0
	Multiple Victimi- zations	Times prog. change in offenses	-\$2,592						
	One Victimi- zation	Cumulative program benefits	-\$7,656						
	Multiple Victimi- zations	Cumulative NPV	\$7,768						
Vic. Quality of Life Costs	One Victimi- zation	Cumulative benefits/dollar of cost	\$2.01						
	One Victimi- zation	Dist. of multiple victimizations	100%	0.008%	0.07%	0.41%	0.62%	11.66%	87.23% 0.00%
	Multiple Victimi- zations	Lambda per official offense	168.91						
	One Victimi- zation	Expected vict. cost, one offense	-\$28,742	-\$13,559	-\$779	-\$1,642	-\$1,547	-\$11,215	\$0 \$0
	Multiple Victimi- zations	Lambda times change in offenses	30.71						
	One Victimi- zation	Expected vict. benefits with prog.	-\$5,227	-\$2,466	-\$142	-\$299	-\$281	-\$2,039	\$0 \$0
	Multiple Victimi- zations	Cumulative program benefits	-\$10,291						
	One Victimi- zation	Cumulative NPV	\$5,134						
	Multiple Victimi- zations	Cumulative benefits/dollar of cost	\$1.50						
	One Victimi- zation	Estimated present value cost		-\$1,928,591	-\$83,354	-\$5,884	-\$8,008	\$0	\$0 \$0
(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent. (2) Based on: Felony re-convictions in Washington, 7-year follow-up	One Victimi- zation	Expected cost, one victimization	-\$27,803	-\$24,936	-\$1,104	-\$425	-\$1,338	\$0	\$0 \$0
	Multiple Victimi- zations	Times prog. change in offenses	-\$5,056						
	One Victimi- zation	Cumulative program benefits	-\$12,712						
	Multiple Victimi- zations	Cumulative NPV	\$2,713						
	One Victimi- zation	Cumulative benefits/dollar of cost	\$1.21						
	Multiple Victimi- zations	Expected vict. cost, one offense	-\$47,955	-\$25,161	-\$10,330	-\$4,065	-\$8,400	\$0	\$0 \$0
	One Victimi- zation	Expected vict. benefits with prog.	-\$8,720	-\$4,575	-\$1,878	-\$739	-\$1,527	\$0	\$0 \$0
	Multiple Victimi- zations	Cumulative program benefits	-\$19,011						
	One Victimi- zation	Cumulative NPV	-\$3,587						
	Multiple Victimi- zations	Cumulative benefits/dollar of cost	\$0.81						

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington, 7-year follow-up

Table IV—L

Adult In-Prison Therapeutic Community without Community Aftercare

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person	
	Estimated effect size (from research findings)	-0.048			0.000			
Expected outcomes for those ...								
...without the program ⁽²⁾		53.0%	X	2.21	=	1.173		
...with the program (from effect sizes)		50.6%	X	2.21	=	1.121		
Expected change in the number of offenses ⁽²⁾						-0.053		
Adjustments	Adjustment 1: (felonies as % of total)		100.0%					
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)		89.8%					
	Without the program, the adjusted expected number of offenses per person		1.306					
	With the program, the adjusted expected number of offenses per person		1.248					
	Expected change in the long-run number of offenses, after adjustments		-0.0585					
Percentage change			-4.5%					
		Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug Misd.
Taxpayer CJS Costs	Cost of One Future Offense	Present value cost of one offense	-\$416,109	-\$98,667	-\$102,716	-\$57,111	-\$17,679	\$22,638 \$0
		W/O Prog., offense distribution ⁽²⁾	100%	0.76%	1.92%	5.79%	8.58%	46.85% 36.10% 0.00%
		Expected cost (PV) of one offense	-\$32,362	-\$3,164	-\$1,893	-\$5,950	-\$4,901	-\$8,282 -\$8,172 \$0
		With Prog., offense distribution	100%	0.76%	1.92%	5.79%	8.58%	46.85% 36.10% 0.00%
		Expected cost (PV) of one offense	-\$32,362	-\$3,164	-\$1,893	-\$5,950	-\$4,901	-\$8,282 -\$8,172 \$0
	Program Benefits and Costs	Adj. 4: (Overall adjustment to cost)	0.9					
		Future CJS costs without program	-\$38,039					
		Future CJS costs with program	-\$36,334					
		Future CJS costs avoided (incurred)	\$1,704					
		Incremental Treatment Cost (savings)	\$2,604					
Victim Monetary Costs	One Victimization Per Offense	NPV of the program	-\$899					
		Benefits per dollar of cost	\$0.65					
		Pct. reduction to break-even	-6.8%					
		Estimated present value cost						
		Distribution of one victimization ⁽²⁾	100.00%	0.76%	1.92%	5.79%	8.58%	46.85% 36.10% 0.00%
	Multiple Victimization Per Offense	Expected cost, one victimization	-\$8,290	-\$7,668	-\$115	-\$135	-\$120	-\$251 \$0 \$0
		Times prog. change in offenses	\$485					
		Cumulative program benefits	\$2,190					
		Cumulative NPV	-\$414					
		Cumulative benefits/dollar of cost	\$0.84					
Vic. Quality of Life Costs	One Victimization	Dist. of multiple victimizations	100%	0.003%	0.06%	0.18%	0.18%	5.46% 94.12% 0.00%
		Lambda per official offense	306.82					
		Expected vict. cost, one offense	-\$19,857	-\$7,737	-\$1,076	-\$1,296	-\$755	-\$8,993 \$0 \$0
		Lambda times change in offenses	-17.96					
		Expected vict. benefits with prog.	\$1,162	\$453	\$63	\$76	\$44	\$526 \$0 \$0
	Multiple Victimization	Cumulative program benefits	\$2,866					
		Cumulative NPV	\$263					
		Cumulative benefits/dollar of cost	\$1.10					
		Estimated present value cost						
		Expected cost, one victimization	-\$16,742	-\$1,871,472	-\$79,426	-\$5,789	-\$7,613	\$0 \$0 \$0
	Multiple Victimization	Times prog. change in offenses	\$980	-\$14,229	-\$1,524	-\$335	-\$653	\$0 \$0 \$0
		Cumulative program benefits	\$3,169					
		Cumulative NPV	\$566					
		Cumulative benefits/dollar of cost	\$1.22					
		Expected vict. cost, one offense	-\$35,925	-\$14,357	-\$14,260	-\$3,208	-\$4,100	\$0 \$0 \$0

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington for non-sex offenders leaving prison, 8 years after release

Table IV—L

Adult In-Prison Therapeutic Community with Community Aftercare

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person	
	Estimated effect size (from research findings)		-0.080		0.000			
	Expected outcomes for those ...							
	...without the program ⁽²⁾		53.0%	X	2.21	=	1.173	
	...with the program (from effect sizes)		49.0%	X	2.21	=	1.085	
	Expected change in the number of offenses ⁽²⁾						-0.088	
Adjustments	Adjustment 1: (felonies as % of total)				100.0%			
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)				89.8%			
	Without the program, the adjusted expected number of offenses per person				1.306			
	With the program, the adjusted expected number of offenses per person				1.208			
	Expected change in the long-run number of offenses, after adjustments				-0.0981			
	Percentage change				-7.5%			
		Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug Misd.
Taxpayer CJS Costs	Cost of One Future Offense	Present value cost of one offense	-\$416,109	-\$98,667	-\$102,716	-\$57,111	-\$17,679	-\$22,638 \$0
		W/O Prog., offense distribution ⁽²⁾	100%	0.76%	1.92%	5.79%	8.58%	46.85% 36.10% 0.00%
		Expected cost (PV) of one offense	-\$32,362	-\$3,164	-\$1,893	-\$5,950	-\$4,901	-\$8,282 -\$8,172 \$0
		With Prog., offense distribution	100%	0.76%	1.92%	5.79%	8.58%	46.85% 36.10% 0.00%
		Expected cost (PV) of one offense	-\$32,362	-\$3,164	-\$1,893	-\$5,950	-\$4,901	-\$8,282 -\$8,172 \$0
	Program Benefits and Costs	Adj. 4: (Overall adjustment to cost)	0.9					
		Future CJS costs without program	-\$38,039					
		Future CJS costs with program	-\$35,181					
		Future CJS costs avoided (incurred)	\$2,857					
		Incremental Treatment Cost (savings)	\$3,100					
Victim Monetary Costs	Sum- mary	NPV of the program	-\$243					
		Benefits per dollar of cost	\$0.92					
		Pct. reduction to break-even	-8.1%					
		Estimated present value cost						
		Distribution of one victimization ⁽²⁾	100.00%	0.76%	1.92%	5.79%	8.58%	46.85% 36.10% 0.00%
	One Victim- ization Per Offense	Expected cost, one victimization	-\$8,290	-\$7,668	-\$115	-\$135	-\$120	-\$251 \$0 \$0
		Times prog. change in offenses	\$813					
		Cumulative program benefits	\$3,671					
		Cumulative NPV	\$571					
		Cumulative benefits/dollar of cost	\$1.18					
Vic. Quality of Life Costs	Multiple Victimi- zations Per Offense	Dist. of multiple victimizations	100%	0.003%	0.06%	0.18%	0.18%	5.46% 94.12% 0.00%
		Lambda per official offense	306.82					
		Expected vict. cost, one offense	-\$19,857	-\$7,737	-\$1,076	-\$1,296	-\$755	-\$8,993 \$0 \$0
		Lambda times change in offenses	-30.10					
		Expected vict. benefits with prog.	\$1,948	\$759	\$106	\$127	\$74	\$882 \$0 \$0
		Cumulative program benefits	\$4,806					
		Cumulative NPV	\$1,705					
		Cumulative benefits/dollar of cost	\$1.55					
	One Victimi- zation	Estimated present value cost						
		Expected cost, one victimization	-\$16,742	-\$1,871,472	-\$79,426	-\$5,789	-\$7,613	\$0 \$0 \$0
		Times prog. change in offenses	\$1,642	-\$14,229	-\$1,524	-\$335	-\$653	\$0 \$0 \$0
		Cumulative program benefits	\$5,313					
		Cumulative NPV	\$2,213					
Multiple Victimi- zations	Expected vict. cost, one offense	-\$35,925	-\$14,357	-\$14,260	-\$3,208	-\$4,100	\$0	\$0 \$0
		Expected vict. benefits with prog.	\$3,524	\$1,409	\$1,399	\$315	\$402	\$0 \$0 \$0
	Cumulative program benefits	\$8,330						
		Cumulative NPV	\$5,230					
	Cumulative benefits/dollar of cost	\$2.69						

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington for non-sex offenders leaving prison, 8 years after release

Table IV—L
Non-Prison Therapeutic Community

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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	...with the program (from effect sizes)		44.5%		X 2.21 = <u>0.984</u>																																																																																																																																																																																																																																																																																																																																																																																																																																																														
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Assault	Fel. Prop.	Drug	Misd.	Cost of One Future Offense									Present value cost of one offense	-\$416,109	-\$98,667	-\$102,716	-\$57,111	-\$17,679	-\$22,638	\$0		W/O Prog., offense distribution ⁽²⁾	100%	0.76%	1.92%	5.79%	8.58%	46.85%	36.10%	0.00%	Expected cost (PV) of one offense	-\$32,362	-\$3,164	-\$1,893	-\$5,950	-\$4,901	-\$8,282	-\$8,172	\$0	With Prog., offense distribution	100%	0.76%	1.92%	5.79%	8.58%	46.85%	36.10%	0.00%	Expected cost (PV) of one offense	-\$32,362	-\$3,164	-\$1,893	-\$5,950	-\$4,901	-\$8,282	-\$8,172	\$0	Adj. 4: (Overall adjustment to cost)	0.9								Program Benefits and Costs									Future CJS costs without program	-\$38,039								Future CJS costs with program	-\$31,916								Future CJS costs avoided (incurred)	\$6,123								Incremental Treatment Cost (savings)	\$2,013								Sum- mary									NPV of the program	\$4,110								Benefits per dollar of cost	\$3.04								Pct. reduction to break-even	-5.3%								<table border="1"> <thead> <tr> <th></th> <th>Total</th> <th>Murder</th> <th>Sex Offenses</th> <th>Robbery</th> <th>Agg. 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(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington for non-sex offenders leaving prison, 8 years after release

Table IV—L

Adult In-Prison Non-residential Substance Abuse Treatment

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person	
	Estimated effect size (from research findings)	-0.088			0.000			
Expected outcomes for those ...								
...without the program ⁽²⁾		53.0%	X	2.21	=	1.173		
...with the program (from effect sizes)		48.6%	X	2.21	=	<u>1.075</u>		
Expected change in the number of offenses ⁽²⁾						<u>-0.098</u>		
Adjustments	Adjustment 1: (felonies as % of total)						100.0%	
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)						89.8%	
	Without the program, the adjusted expected number of offenses per person						1.306	
	With the program, the adjusted expected number of offenses per person						<u>1.197</u>	
	Expected change in the long-run number of offenses, after adjustments						<u>-0.1089</u>	
Percentage change							-8.3%	
Taxpayer CJS Costs	Cost of One Future Offense	Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug Misd.
		Present value cost of one offense	-\$416,109	-\$98,667	-\$102,716	-\$57,111	-\$17,679	-\$22,638 \$0
		W/O Prog., offense distribution ⁽²⁾	100%	0.76%	1.92%	5.79%	8.58%	46.85% 36.10% 0.00%
		Expected cost (PV) of one offense	<u>-\$32,362</u>	-\$3,164	-\$1,893	-\$5,950	-\$4,901	-\$8,282 -\$8,172 \$0
		With Prog., offense distribution	100%	0.76%	1.92%	5.79%	8.58%	46.85% 36.10% 0.00%
	Program Benefits and Costs	Expected cost (PV) of one offense	<u>-\$32,362</u>	-\$3,164	-\$1,893	-\$5,950	-\$4,901	-\$8,282 -\$8,172 \$0
		Adj. 4: (Overall adjustment to cost)	<u>0.9</u>					
		Future CJS costs without program	-\$38,039					
		Future CJS costs with program	<u>-\$34,867</u>					
Victim Monetary Costs	One Victimization Per Offense	Future CJS costs avoided (incurred)	<u>\$3,172</u>					
		Incremental Treatment Cost (savings)	\$1,500					
		NPV of the program	<u>\$1,672</u>					
		Benefits per dollar of cost	<u>\$2.11</u>					
		Pct. reduction to break-even	-3.9%					
	Multiple Victimization Per Offense	Estimated present value cost		-\$1,008,563	-\$5,993	-\$2,338	-\$1,402	-\$536 \$0 \$0
		Distribution of one victimization ⁽²⁾	100.00%	0.76%	1.92%	5.79%	8.58%	46.85% 36.10% 0.00%
		Expected cost, one victimization	<u>-\$8,290</u>	-\$7,668	-\$115	-\$135	-\$120	-\$251 \$0 \$0
		Times prog. change in offenses	\$903					
		Cumulative program benefits	\$4,075					
Vic. Quality of Life Costs	One Victimization	Cumulative NPV	<u>\$2,575</u>					
		Cumulative benefits/dollar of cost	<u>\$2.72</u>					
		Dist. of multiple victimizations	100%	0.003%	0.06%	0.18%	0.18%	5.46% 94.12% 0.00%
		Lambda per official offense	306.82					
		Expected vict. cost, one offense	<u>-\$19,857</u>	-\$7,737	-\$1,076	-\$1,296	-\$755	-\$8,993 \$0 \$0
	Multiple Victimization	Lambda times change in offenses	-33.42					
		Expected vict. benefits with prog.	\$2,163	\$843	\$117	\$141	\$82	\$979 \$0 \$0
		Cumulative program benefits	\$5,335					
		Cumulative NPV	<u>\$3,835</u>					
		Cumulative benefits/dollar of cost	<u>\$3.56</u>					

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington for non-sex offenders leaving prison, 8 years after release

Table IV—L

Adult Drug Courts

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses	...the Avg. # of Offenses per Offender	Expected Number of Offenses per Person				
	Estimated effect size (from research findings)	-0.075			0.952	0.870	-0.082		
	Expected outcomes for those ...								
	...without the program ⁽²⁾	43.2%	X	2.20	=	0.952			
	...with the program (from effect sizes)	39.5%	X	2.20	=	0.870			
	Expected change in the number of offenses ⁽²⁾						-0.082		
Adjustments	Adjustment 1: (felonies as % of total)						100.0%		
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)						89.8%		
	Without the program, the adjusted expected number of offenses per person						1.060		
	With the program, the adjusted expected number of offenses per person						0.969		
	Expected change in the long-run number of offenses, after adjustments						-0.0911		
	Percentage change						-8.6%		
		Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.
Taxpayer CJS Costs	Cost of One Future Offense	Present value cost of one offense	-\$423,092	-\$99,993	-\$101,154	-\$57,199	-\$17,651	-\$22,491	\$0
	W/O Prog., offense distribution ⁽²⁾	100%	0.72%	1.86%	3.48%	7.71%	48.01%	38.23%	0.00%
	Expected cost (PV) of one offense	-\$29,917	-\$3,062	-\$1,859	-\$3,517	-\$4,407	-\$8,474	-\$8,598	\$0
	With Prog., offense distribution	100%	0.72%	1.86%	3.48%	7.71%	48.01%	38.23%	0.00%
	Expected cost (PV) of one offense	-\$29,917	-\$3,062	-\$1,859	-\$3,517	-\$4,407	-\$8,474	-\$8,598	\$0
	Adj. 4: (Overall adjustment to cost)	0.9							
	Program Benefits and Costs	Future CJS costs without program	-\$28,531						
		Future CJS costs with program	-\$26,078						
		Future CJS costs avoided (incurred)	\$2,453						
		Incremental Treatment Cost (savings)	\$2,562						
	Sum- mary	NPV of the program	-\$109						
		Benefits per dollar of cost	\$0.96						
		Pct. reduction to break-even	-9.0%						
Victim Monetary Costs	One Victimi- zation Per Offense	Estimated present value cost	-\$1,025,489	-\$6,073	-\$2,303	-\$1,404	-\$536	\$0	\$0
		Distribution of one victimization ⁽²⁾	100.00%	0.72%	1.86%	3.48%	7.71%	48.01%	38.23%
		Expected cost, one victimization	-\$7,980	-\$7,422	-\$113	-\$80	-\$108	-\$257	\$0
		Times prog. change in offenses	\$727						
		Cumulative program benefits	\$3,181						
		Cumulative NPV	\$618						
		Cumulative benefits/dollar of cost	\$1.24						
	Multiple Victimi- zations Per Offense	Dist. of multiple victimizations	100%	0.002%	0.05%	0.10%	0.15%	5.30%	94.39%
		Lambda per official offense	324.01						
		Expected vict. cost, one offense	-\$19,190	-\$7,488	-\$1,056	-\$766	-\$679	-\$9,201	\$0
		Lambda times change in offenses	-29.52						
		Expected vict. benefits with prog.	\$1,749	\$682	\$96	\$70	\$62	\$838	\$0
		Cumulative program benefits	\$4,202						
		Cumulative NPV	\$1,640						
		Cumulative benefits/dollar of cost	\$1.64						
Vic. Quality of Life Costs	One Victimi- zation	Estimated present value cost	-\$1,902,879	-\$80,494	-\$5,701	-\$7,625	\$0	\$0	\$0
		Expected cost, one victimization	-\$16,053	-\$13,771	-\$1,496	-\$198	-\$588	\$0	\$0
		Times prog. change in offenses	\$1,463						
		Cumulative program benefits	\$4,643						
		Cumulative NPV	\$2,081						
		Cumulative benefits/dollar of cost	\$1.81						
	Multiple Victimi- zations	Expected vict. cost, one offense	-\$33,479	-\$13,895	-\$14,000	-\$1,896	-\$3,687	\$0	\$0
		Expected vict. benefits with prog.	\$3,051	\$1,266	\$1,276	\$173	\$336	\$0	\$0
		Cumulative program benefits	\$7,253						
		Cumulative NPV	\$4,691						
		Cumulative benefits/dollar of cost	\$2.83						

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: 0

Table IV—L

Adult Offender Case Management Substance Abuse Programs

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person	
	Estimated effect size (from research findings)	-0.034			0.000			
Expected outcomes for those ...								
...without the program ⁽²⁾	44.5%	X	2.19	=	0.974			
...with the program (from effect sizes)	42.8%	X	2.19	=	0.937			
Expected change in the number of offenses ⁽²⁾								-0.037
Adjustments	Adjustment 1: (felonies as % of total)							100.0%
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)							89.8%
	Without the program, the adjusted expected number of offenses per person							1.085
	With the program, the adjusted expected number of offenses per person							1.043
	Expected change in the long-run number of offenses, after adjustments							-0.0413
	Percentage change							-3.8%
		Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug Misd.
Taxpayer CJS Costs	Cost of One Future Offense	Present value cost of one offense	-\$423,092	-\$99,993	-\$101,154	-\$57,199	-\$17,651	-\$22,491 \$0
	W/O Prog., offense distribution ⁽²⁾	100%	0.79%	1.82%	4.17%	8.58%	47.06%	37.57% 0.00%
	Expected cost (PV) of one offense	-\$31,054	-\$3,345	-\$1,822	-\$4,222	-\$4,908	-\$8,308	-\$8,450 \$0
	With Prog., offense distribution	100%	0.79%	1.82%	4.17%	8.58%	47.06%	37.57% 0.00%
	Expected cost (PV) of one offense	-\$31,054	-\$3,345	-\$1,822	-\$4,222	-\$4,908	-\$8,308	-\$8,450 \$0
	Adj. 4: (Overall adjustment to cost)	0.9						
	Program Benefits and Costs	Future CJS costs without program	-\$30,313					
		Future CJS costs with program	-\$29,159					
		Future CJS costs avoided (incurred)	\$1,154					
		Incremental Treatment Cost (savings)	\$2,204					
	Sum- mary	NPV of the program	-\$1,050					
		Benefits per dollar of cost	\$0.52					
		Pct. reduction to break-even	-7.3%					
Victim Monetary Costs	One Victimi- zation Per Offense	Estimated present value cost	-\$1,025,489	-\$6,073	-\$2,303	-\$1,404	-\$536	\$0 \$0
		Distribution of one victimization ⁽²⁾	100.00%	0.79%	1.82%	4.17%	8.58%	47.06% 37.57% 0.00%
		Expected cost, one victimization	-\$8,686	-\$8,107	-\$111	-\$96	-\$120	-\$252 \$0 \$0
		Times prog. change in offenses	\$359					
		Cumulative program benefits	\$1,513					
		Cumulative NPV	-\$691					
		Cumulative benefits/dollar of cost	\$0.69					
	Multiple Victimi- zations Per Offense	Dist. of multiple victimizations	100%	0.003%	0.05%	0.13%	0.17%	5.29% 94.36% 0.00%
		Lambda per official offense	318.51					
		Expected vict. cost, one offense	-\$19,911	-\$8,180	-\$1,035	-\$919	-\$756	-\$9,020 \$0 \$0
		Lambda times change in offenses	-13.15					
		Expected vict. benefits with prog.	\$822	\$338	\$43	\$38	\$31	\$373 \$0 \$0
		Cumulative program benefits	\$1,977					
		Cumulative NPV	-\$228					
		Cumulative benefits/dollar of cost	\$0.90					
Vic. Quality of Life Costs	One Victimi- zation	Estimated present value cost	-\$1,902,879	-\$80,494	-\$5,701	-\$7,625	\$0	\$0 \$0
		Expected cost, one victimization	-\$17,401	-\$15,043	-\$1,467	-\$238	-\$654	\$0 \$0 \$0
		Times prog. change in offenses	\$719					
		Cumulative program benefits	\$2,232					
		Cumulative NPV	\$27					
		Cumulative benefits/dollar of cost	\$1.01					
	Multiple Victimi- zations	Expected vict. cost, one offense	-\$35,282	-\$15,178	-\$13,722	-\$2,276	-\$4,106	\$0 \$0 \$0
		Expected vict. benefits with prog.	\$1,457	\$627	\$567	\$94	\$170	\$0 \$0 \$0
		Cumulative program benefits	\$3,434					
		Cumulative NPV	\$1,230					
		Cumulative benefits/dollar of cost	\$1.56					

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington for non-sex offenders leaving prison or placed on community supervision, 8-year follow-up

Table IV—L

Adult Community-Based Substance Abuse Treatment

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person	
	Estimated effect size (from research findings)	-0.072			0.000			
	Expected outcomes for those ...							
	...without the program ⁽²⁾	44.5%	X	2.19	=	0.974		
	...with the program (from effect sizes)	40.9%	X	2.19	=	0.896		
	Expected change in the number of offenses ⁽²⁾						-0.078	
Adjustments	Adjustment 1: (felonies as % of total)						100.0%	
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)						89.8%	
	Without the program, the adjusted expected number of offenses per person						1.085	
	With the program, the adjusted expected number of offenses per person						0.997	
	Expected change in the long-run number of offenses, after adjustments						-0.0872	
	Percentage change						-8.0%	
Taxpayer CJS Costs	Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.
	Cost of One Future Offense	Present value cost of one offense	-\$423,092	-\$99,993	-\$101,154	-\$57,199	-\$17,651	-\$22,491
	Program Benefits and Costs	W/O Prog., offense distribution ⁽²⁾	100%	0.79%	1.82%	4.17%	8.58%	47.06%
	Sum- mary	Expected cost (PV) of one offense	-\$31,054	-\$3,345	-\$1,822	-\$4,222	-\$4,908	-\$8,308
	One Victimi- zation Per Offense	With Prog., offense distribution	100%	0.79%	1.82%	4.17%	8.58%	47.06%
	Multiple Victimization Per Offense	Expected cost (PV) of one offense	-\$31,054	-\$3,345	-\$1,822	-\$4,222	-\$4,908	-\$8,308
	Multiple Victimi- zations	Adj. 4: (Overall adjustment to cost)	0.9					
	One Victimi- zation	Future CJS costs without program	-\$30,313					
	One Victimi- zation	Future CJS costs with program	-\$27,877					
	One Victimi- zation	Future CJS costs avoided (incurred)	\$2,436					
Victim Monetary Costs	One Victimi- zation	Incremental Treatment Cost (savings)	\$2,198					
	One Victimi- zation	NPV of the program	\$237					
	One Victimi- zation	Benefits per dollar of cost	\$1.11					
	One Victimi- zation	Pct. reduction to break-even	-7.3%					
	One Victimi- zation	Estimated present value cost		-\$1,025,489	-\$6,073	-\$2,303	-\$1,404	-\$536
	One Victimi- zation	Distribution of one victimization ⁽²⁾	100.00%	0.79%	1.82%	4.17%	8.58%	47.06%
	One Victimi- zation	Expected cost, one victimization	-\$8,686	-\$8,107	-\$111	-\$96	-\$120	-\$252
	One Victimi- zation	Times prog. change in offenses	\$757					
	One Victimi- zation	Cumulative program benefits	\$3,193					
	One Victimi- zation	Cumulative NPV	\$994					
Vic. Quality of Life Costs	One Victimi- zation	Cumulative benefits/dollar of cost	\$1.45					
	One Victimi- zation	Dist. of multiple victimizations	100%	0.003%	0.05%	0.13%	0.17%	5.29%
	One Victimi- zation	Lambda per official offense	318.51					
	One Victimi- zation	Expected vict. cost, one offense	-\$19,911	-\$8,180	-\$1,035	-\$919	-\$756	-\$9,020
	One Victimi- zation	Lambda times change in offenses	-27.76					
	One Victimi- zation	Expected vict. benefits with prog.	\$1,735	\$713	\$90	\$80	\$66	\$786
	One Victimi- zation	Cumulative program benefits	\$4,171					
	One Victimi- zation	Cumulative NPV	\$1,973					
	One Victimi- zation	Cumulative benefits/dollar of cost	\$1.90					
	One Victimi- zation	Estimated present value cost		-\$1,902,879	-\$80,494	-\$5,701	-\$7,625	\$0
Multiple Victimi- zations	One Victimi- zation	Expected cost, one victimization	-\$17,401	-\$15,043	-\$1,467	-\$238	-\$654	\$0
	One Victimi- zation	Times prog. change in offenses	\$1,517					\$0
	One Victimi- zation	Cumulative program benefits	\$4,709					\$0
	One Victimi- zation	Cumulative NPV	\$2,511					\$0
	One Victimi- zation	Cumulative benefits/dollar of cost	\$2.14					\$0
Multiple Victimi- zations	One Victimi- zation	Expected vict. cost, one offense	-\$35,282	-\$15,178	-\$13,722	-\$2,276	-\$4,106	\$0
	One Victimi- zation	Expected vict. benefits with prog.	\$3,075	\$1,323	\$1,196	\$198	\$358	\$0
	One Victimi- zation	Cumulative program benefits	\$7,246					\$0
	One Victimi- zation	Cumulative NPV	\$5,048					\$0
	One Victimi- zation	Cumulative benefits/dollar of cost	\$3.30					\$0

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington for non-sex offenders leaving prison or placed on community supervision, 8-year follow-up

Table IV—L

Adult Drug Treatment Programs in Jails

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses	...the Avg. # of Offenses per Offender	Expected Number of Offenses per Person				
	Estimated effect size (from research findings)	-0.047			0.000	0.952	0.900		
	Expected outcomes for those ...								
	...without the program ⁽²⁾	43.2%	X	2.20	=	0.952			
	...with the program (from effect sizes)	40.9%	X	2.20	=	0.900			
	Expected change in the number of offenses ⁽²⁾					-0.051			
Adjustments	Adjustment 1: (felonies as % of total)					100.0%			
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)					89.8%			
	Without the program, the adjusted expected number of offenses per person					1.060			
	With the program, the adjusted expected number of offenses per person					1.002			
	Expected change in the long-run number of offenses, after adjustments					-0.0573			
	Percentage change					-5.4%			
		Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.
Taxpayer CJS Costs	Cost of One Future Offense	Present value cost of one offense	-\$416,109	-\$98,667	-\$102,716	-\$57,111	-\$17,679	\$22,638	\$0
	Program Benefits and Costs	W/O Prog., offense distribution ⁽²⁾	100%	0.72%	1.86%	3.48%	7.71%	48.01%	38.23% 0.00%
	Sum- mary	Expected cost (PV) of one offense	-\$29,958	-\$3,011	-\$1,834	-\$3,571	-\$4,401	-\$8,487	-\$8,654 \$0
	One Victi- mization Per Offense	With Prog., offense distribution	100%	0.72%	1.86%	3.48%	7.71%	48.01%	38.23% 0.00%
	Multiple Victi- mizations Per Offense	Expected cost (PV) of one offense	-\$29,958	-\$3,011	-\$1,834	-\$3,571	-\$4,401	-\$8,487	-\$8,654 \$0
	One Victi- mization	Adj. 4: (Overall adjustment to cost)	0.9						
Victim Monetary Costs	One Victi- mization Per Offense	Future CJS costs without program	-\$28,571						
	Multiple Victi- mizations Per Offense	Future CJS costs with program	-\$27,026						
	One Victi- mization	Future CJS costs avoided (incurred)	\$1,545						
	Multiple Victi- mizations	Incremental Treatment Cost (savings)	\$1,172						
Vic. Quality of Life Costs	One Victi- mization	NPV of the program	\$373						
	Multiple Victi- mizations	Benefits per dollar of cost	\$1.32						
	One Victi- mization	Pct. reduction to break-even	-4.1%						
	One Victi- mization	Estimated present value cost		-\$1,008,563	-\$5,993	-\$2,338	-\$1,402	-\$536	\$0 \$0
	Multiple Victi- mizations	Distribution of one victimization ⁽²⁾	100.00%	0.72%	1.86%	3.48%	7.71%	48.01%	38.23% 0.00%
	One Victi- mization	Expected cost, one victimization	-\$7,857	-\$7,299	-\$111	-\$81	-\$108	-\$257	\$0 \$0
	Multiple Victi- mizations	Times prog. change in offenses	\$450						
	One Victi- mization	Cumulative program benefits	\$1,995						
	Multiple Victi- mizations	Cumulative NPV	\$823						
	One Victi- mization	Cumulative benefits/dollar of cost	\$1.70						
	One Victi- mization	Dist. of multiple victimizations	100%	0.002%	0.05%	0.10%	0.15%	5.30%	94.39% 0.00%
	Multiple Victi- mizations	Lambda per official offense	324.01						
	One Victi- mization	Expected vict. cost, one offense	-\$19,077	-\$7,365	-\$1,042	-\$778	-\$678	-\$9,215	\$0 \$0
	Multiple Victi- mizations	Lambda times change in offenses	-18.56						
	One Victi- mization	Expected vict. benefits with prog.	\$1,093	\$422	\$60	\$45	\$39	\$528	\$0 \$0
	Multiple Victi- mizations	Cumulative program benefits	\$2,637						
	One Victi- mization	Cumulative NPV	\$1,466						
	Multiple Victi- mizations	Cumulative benefits/dollar of cost	\$2.25						
	One Victi- mization	Estimated present value cost		-\$1,871,472	-\$79,426	-\$5,789	-\$7,613	\$0	\$0 \$0
	Multiple Victi- mizations	Expected cost, one victimization	-\$15,808	-\$13,544	-\$1,476	-\$201	-\$587	\$0	\$0 \$0
	One Victi- mization	Times prog. change in offenses	\$906						
	Multiple Victi- mizations	Cumulative program benefits	\$2,900						
	One Victi- mization	Cumulative NPV	\$1,729						
	Multiple Victi- mizations	Cumulative benefits/dollar of cost	\$2.48						
	One Victi- mization	Expected vict. cost, one offense	-\$33,087	-\$13,666	-\$13,815	-\$1,925	-\$3,681	\$0	\$0 \$0
	Multiple Victi- mizations	Expected vict. benefits with prog.	\$1,895	\$783	\$791	\$110	\$211	\$0	\$0 \$0
	One Victi- mization	Cumulative program benefits	\$4,533						
	Multiple Victi- mizations	Cumulative NPV	\$3,361						
	One Victi- mization	Cumulative benefits/dollar of cost	\$3.87						

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: 0

Table IV—L

Adult Cognitive-Behavioral Sex Offender Treatment with (or without) Relapse Prevention								
Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person	
	Estimated effect size (from research findings)		-0.107		0.000			
	Expected outcomes for those ...		24.5%	X	1.56	=	0.383	
	...without the program ⁽²⁾		20.0%	X	1.56	=	<u>0.313</u>	
Expected change in the number of offenses ⁽²⁾							-0.069	
Adjustments	Adjustment 1: (felonies as % of total)		100.0%					
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)		89.8%					
	Without the program, the adjusted expected number of offenses per person		0.426					
	With the program, the adjusted expected number of offenses per person		<u>0.349</u>					
	Expected change in the long-run number of offenses, after adjustments		-0.0772					
Percentage change			-18.1%					
Taxpayer CJS Costs	Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.
	Cost of One Future Offense							
	Present value cost of one offense	-\$416,109	-\$98,667	-\$102,716	-\$57,111	-\$17,679	-\$22,638	\$0
	W/O Prog., offense distribution ⁽²⁾	100%	1.08%	26.34%	3.76%	24.73%	22.58%	21.51% 0.00%
	Expected cost (PV) of one offense	<u>-\$57,317</u>	<u>-\$4,474</u>	<u>-\$25,993</u>	<u>-\$3,866</u>	<u>-\$14,124</u>	<u>-\$3,992</u>	<u>-\$4,868</u> \$0
	With Prog., offense distribution	100%	1.20%	17.91%	4.19%	27.56%	25.17%	23.97% 0.00%
	Expected cost (PV) of one offense	<u>-\$52,583</u>	<u>-\$4,987</u>	<u>-\$17,672</u>	<u>-\$4,308</u>	<u>-\$15,741</u>	<u>-\$4,449</u>	<u>-\$5,426</u> \$0
	Adj. 4: (Overall adjustment to cost)	0.9						
	Program Benefits and Costs							
	Future CJS costs without program	-\$21,967						
Victim Monetary Costs	Sum- mary	Future CJS costs with program	<u>-\$16,498</u>					
	Future CJS costs avoided (incurred)	<u>\$5,469</u>						
	Incremental Treatment Cost (savings)	\$6,246						
	One Victim- ization Per Offense	NPV of the program	-\$778					
	Benefits per dollar of cost	\$0.88						
	Pct. reduction to break-even	-28.4%						
	Multiple Victimi- zations Per Offense	Estimated present value cost	-\$1,008,563	-\$5,993	-\$2,338	-\$1,402	-\$536	\$0 \$0
	Distribution of one victimization ⁽²⁾	100.00%	1.08%	26.34%	3.76%	24.73%	22.58%	21.51% 0.00%
	Expected cost, one victimization	<u>-\$12,979</u>	<u>-\$10,845</u>	<u>-\$1,579</u>	<u>-\$88</u>	<u>-\$347</u>	<u>-\$121</u>	<u>\$0</u> \$0
	Times prog. change in offenses	\$1,002						
Vic. Quality of Life Costs	One Victimi- zation	Cumulative program benefits	\$6,471					
	Cumulative NPV	\$225						
	Cumulative benefits/dollar of cost	\$1.04						
	Multiple Victimi- zations	Dist. of multiple victimizations	100%	0.006%	1.34%	0.20%	0.84%	4.38% 93.24% 0.00%
	Lambda per official offense	184.51						
	Expected vict. cost, one offense	<u>-\$33,066</u>	<u>-\$10,942</u>	<u>-\$14,771</u>	<u>-\$842</u>	<u>-\$2,176</u>	<u>-\$4,334</u>	<u>\$0</u> \$0
	Lambda times change in offenses	-14.25						
	Expected vict. benefits with prog.	\$2,553	\$845	\$1,141	\$65	\$168	\$335	\$0 \$0
	Cumulative program benefits	\$8,022						
	Cumulative NPV	\$1,776						
	Cumulative benefits/dollar of cost	\$1.28						

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington for sex offenders leaving prison, 8 years after release

Table IV—L

Adult Intensive Supervision: Surveillance-Oriented Enhancements to Probation/Parole

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses	...the Avg. # of Offenses per Offender	Expected Number of Offenses per Person			
	Estimated effect size (from research findings)	-0.032			0.000	0.980	0.945	
	Expected outcomes for those ...							
	...without the program ⁽²⁾	44.2%	X	2.22	=	0.980		
	...with the program (from effect sizes)	42.6%	X	2.22	=	<u>0.945</u>		
	Expected change in the number of offenses ⁽²⁾					-0.036		
Adjustments	Adjustment 1: (felonies as % of total)					100.0%		
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)					89.8%		
	Without the program, the adjusted expected number of offenses per person					1.091		
	With the program, the adjusted expected number of offenses per person					<u>1.052</u>		
	Expected change in the long-run number of offenses, after adjustments					-0.0396		
	Percentage change					-3.6%		
Taxpayer CJS Costs	Cost of One Future Offense	Total	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.
		-\$416,109	-\$98,667	-\$102,716	-\$57,111	-\$17,679	-\$22,638	\$0
		W/O Prog., offense distribution ⁽²⁾	100%	0.64%	1.53%	3.63%	7.23%	48.58%
		Expected cost (PV) of one offense	-\$29,310	-\$2,661	-\$1,512	-\$3,730	-\$4,128	-\$8,588
		With Prog., offense distribution	100%	0.64%	1.53%	3.63%	7.23%	48.58%
		Expected cost (PV) of one offense	-\$29,310	-\$2,661	-\$1,512	-\$3,730	-\$4,128	-\$8,588
		Adj. 4: (Overall adjustment to cost)	0.9					
	Program Benefits and Costs	Future CJS costs without program	-\$28,791					
		Future CJS costs with program	-\$27,746					
		Future CJS costs avoided (incurred)	\$1,046					
		Incremental Treatment Cost (savings)	\$3,296					
	Sum- mary	NPV of the program	-\$2,250					
		Benefits per dollar of cost	\$0.32					
		Pct. reduction to break-even	-11.4%					
Victim Monetary Costs	One Victimi- zation Per Offense	Estimated present value cost		-\$1,008,563	-\$5,993	-\$2,338	-\$1,402	-\$536
		Distribution of one victimization ⁽²⁾	100.00%	0.64%	1.53%	3.63%	7.23%	48.58%
		Expected cost, one victimization	-\$6,988	-\$6,450	-\$92	-\$85	-\$101	-\$261
		Times prog. change in offenses	\$277					
		Cumulative program benefits	\$1,323					
	Multiple Victimi- zations Per Offense	Cumulative NPV	-\$1,973					
		Cumulative benefits/dollar of cost	\$0.40					
		Dist. of multiple victimizations	100%	0.002%	0.04%	0.11%	0.14%	5.34%
		Lambda per official offense	325.48					94.37%
		Expected vict. cost, one offense	-\$18,139	-\$6,508	-\$859	-\$812	-\$636	-\$9,324
Vic. Quality of Life Costs	One Victimi- zation	Lambda times change in offenses	-12.90					\$0
		Expected vict. benefits with prog.	\$719	\$258	\$34	\$32	\$25	\$370
		Cumulative program benefits	\$1,765					\$0
		Cumulative NPV	-\$1,531					\$0
		Cumulative benefits/dollar of cost	\$0.54					
	Multiple Victimi- zations	Estimated present value cost		-\$1,871,472	-\$79,426	-\$5,789	-\$7,613	\$0
		Expected cost, one victimization	-\$13,945	-\$11,968	-\$1,217	-\$210	-\$550	\$0
		Times prog. change in offenses	\$553					\$0
		Cumulative program benefits	\$1,876					

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in WA for non-sex, non-person offenders leaving prison or placed on community supervision, 8-year follow-up

Table IV—L

Adult Intensive Supervision: Treatment-Oriented Enhancement to Probation/Parole

Program Effectiveness (Crime Outcomes)		The expected effect of the program on...		...the Percent with Offenses or Re-Offenses	...the Avg. # of Offenses per Offender	Expected Number of Offenses per Person										
		Estimated effect size (from research findings)				-0.104										
Expected outcomes for those ...																
...without the program ⁽²⁾		44.2%		X	2.22	=	0.980									
...with the program (from effect sizes)		39.0%		X	2.22	=	0.866									
Expected change in the number of offenses ⁽²⁾						-0.114										
Adjustments	Adjustment 1: (felonies as % of total)															
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)															
	Without the program, the adjusted expected number of offenses per person															
	With the program, the adjusted expected number of offenses per person															
	Expected change in the long-run number of offenses, after adjustments															
Percentage change																
		Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.									
							Drug									
							Misd.									
Taxpayer CJS Costs	Cost of One Future Offense	Present value cost of one offense	-\$416,109	-\$98,667	-\$102,716	-\$57,111	-\$17,679	-\$22,638	\$0							
		W/O Prog., offense distribution ⁽²⁾	100%	0.64%	1.53%	3.63%	7.23%	48.58%	38.39% 0.00%							
		Expected cost (PV) of one offense	-\$29,310	-\$2,661	-\$1,512	-\$3,730	-\$4,128	-\$8,588	-\$8,691 \$0							
		With Prog., offense distribution	100%	0.64%	1.53%	3.63%	7.23%	48.58%	38.39% 0.00%							
		Expected cost (PV) of one offense	-\$29,310	-\$2,661	-\$1,512	-\$3,730	-\$4,128	-\$8,588	-\$8,691 \$0							
	Program Benefits and Costs	Adj. 4: (Overall adjustment to cost)	0.9													
		Future CJS costs without program	-\$28,791													
		Future CJS costs with program	-\$25,440													
		Future CJS costs avoided (incurred)	\$3,351													
	Incremental Treatment Cost (savings)		\$3,811													
Victim Monetary Costs	One Victimization Per Offense	NPV of the program	-\$459													
		Benefits per dollar of cost	\$0.88													
		Pct. reduction to break-even	-13.2%													
		Estimated present value cost														
		Distribution of one victimization ⁽²⁾	100.00%	-\$1,008,563	-\$5,993	-\$2,338	-\$1,402	-\$536	\$0 \$0							
	Multiple Victimization Per Offense	Expected cost, one victimization	-\$6,988	0.64%	1.53%	3.63%	7.23%	48.58%	38.39% 0.00%							
		Times prog. change in offenses	\$888	-\$6,450	-\$92	-\$85	-\$101	-\$261	\$0 \$0							
		Cumulative program benefits	\$4,239													
		Cumulative NPV	\$428													
		Cumulative benefits/dollar of cost	\$1.11													
Vic. Quality of Life Costs	One Victimization	Dist. of multiple victimizations	100%	0.002%	0.04%	0.11%	0.14%	5.34%	94.37% 0.00%							
		Lambda per official offense	325.48													
		Expected vict. cost, one offense	-\$18,139	-\$6,508	-\$859	-\$812	-\$636	-\$9,324	\$0 \$0							
		Lambda times change in offenses	-41.35													
		Expected vict. benefits with prog.	\$2,304	\$827	\$109	\$103	\$81	\$1,185	\$0 \$0							
	Multiple Victimization	Cumulative program benefits	\$5,655													
		Cumulative NPV	\$1,845													
		Cumulative benefits/dollar of cost	\$1.48													
		Estimated present value cost														
		Expected cost, one victimization	-\$13,945	-\$1,871,472	-\$79,426	-\$5,789	-\$7,613	\$0	\$0 \$0							
Multiple Victimization	One Victimization	Times prog. change in offenses	\$1,772	-\$11,968	-\$1,217	-\$210	-\$550	\$0	\$0 \$0							
		Cumulative program benefits	\$6,010													
		Cumulative NPV	\$2,200													
		Cumulative benefits/dollar of cost	\$1.58													
		Expected vict. cost, one offense	-\$28,927	-\$12,075	-\$11,388	-\$2,011	-\$3,453	\$0	\$0 \$0							

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in WA for non-sex, non-person offenders leaving prison or placed on community supervision, 8-year follow-up

Table IV—L

Adult Intensive Supervision: Surveillance-Oriented Diversion from Prison

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person		
	Estimated effect size (from research findings)	-0.004			0.000				
	Expected outcomes for those ...								
	...without the program ⁽²⁾	53.0%	X	2.21	=	1.173			
	...with the program (from effect sizes)	52.8%	X	2.21	=	1.168			
	Expected change in the number of offenses ⁽²⁾							-0.005	
Adjustments	Adjustment 1: (felonies as % of total)							100.0%	
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)							89.8%	
	Without the program, the adjusted expected number of offenses per person							1.306	
	With the program, the adjusted expected number of offenses per person							<u>1.301</u>	
	Expected change in the long-run number of offenses, after adjustments							-0.0054	
	Percentage change							-0.4%	
Taxpayer CJS Costs	Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.	
	Cost of One Future Offense	Present value cost of one offense	-\$416,109	-\$98,667	-\$102,716	-\$57,111	-\$17,679	-\$22,638	
	W/O Prog., offense distribution ⁽²⁾	100%	0.76%	1.92%	5.79%	8.58%	46.85%	36.10%	
	Expected cost (PV) of one offense	-\$32,362	-\$3,164	-\$1,893	-\$5,950	-\$4,901	-\$8,282	-\$8,172	
	With Prog., offense distribution	100%	0.76%	1.92%	5.79%	8.58%	46.85%	36.10%	
	Expected cost (PV) of one offense	-\$32,362	-\$3,164	-\$1,893	-\$5,950	-\$4,901	-\$8,282	-\$8,172	
	Adj. 4: (Overall adjustment to cost)	0.9							
	Program Benefits and Costs	Future CJS costs without program	-\$38,039						
		Future CJS costs with program	-\$37,881						
		Future CJS costs avoided (incurred)	\$158						
Victim Monetary Costs	Sum- mary	Incremental Treatment Cost (savings)	-\$5,925						
	One Victimi- zation Per Offense	NPV of the program	\$6,083						
		Benefits per dollar of cost	n/a						
		Pct. reduction to break-even	15.6%						
		Estimated present value cost							
Victim Monetar- y Costs	Multiple Victimi- zations Per Offense	Distribution of one victimization ⁽²⁾	100.00%	0.76%	1.92%	5.79%	8.58%	46.85%	
		Expected cost, one victimization	-\$8,290	-\$7,668	-\$115	-\$135	-\$120	-\$251	
		Times prog. change in offenses	\$45						
		Cumulative program benefits	\$203						
		Cumulative NPV	\$6,129						
		Cumulative benefits/dollar of cost	n/a						
		Dist. of multiple victimizations	100%	0.003%	0.06%	0.18%	0.18%	5.46%	
		Lambda per official offense	306.82					94.12%	
		Expected vict. cost, one offense	-\$19,857	-\$7,737	-\$1,076	-\$1,296	-\$755	-\$8,993	
		Lambda times change in offenses	-1.67					\$0	
Vic. Quality of Life Costs	One Victimi- zation	Expected vict. benefits with prog.	\$108	\$42	\$6	\$7	\$4	\$49	
		Cumulative program benefits	\$266						
		Cumulative NPV	\$6,191						
		Cumulative benefits/dollar of cost	n/a						
		Estimated present value cost							
Multiple Victimi- zations	One Victimi- zation	Expected cost, one victimization	-\$16,742	-\$1,871,472	-\$79,426	-\$5,789	-\$7,613	\$0	
		Times prog. change in offenses	\$91	-\$14,229	-\$1,524	-\$335	-\$653	\$0	
		Cumulative program benefits	\$294					\$0	
		Cumulative NPV	\$6,219					\$0	
		Cumulative benefits/dollar of cost	n/a						

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington for non-sex offenders leaving prison, 8 years after release

Table IV—L
Adult Boot Camps

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses	...the Avg. # of Offenses per Offender	Expected Number of Offenses per Person				
	Estimated effect size (from research findings)	-0.002			1.176	1.174	-0.002		
	Expected outcomes for those ...								
	...without the program ⁽²⁾	53.0%	X	2.22	=	1.176			
	...with the program (from effect sizes)	52.9%	X	2.22	=	1.174			
	Expected change in the number of offenses ⁽²⁾								
Adjustments	Adjustment 1: (felonies as % of total)					100.0%			
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)					73.5%			
	Without the program, the adjusted expected number of offenses per person					1.599			
	With the program, the adjusted expected number of offenses per person					1.596			
	Expected change in the long-run number of offenses, after adjustments					-0.0032			
	Percentage change					-0.2%			
		Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.
Taxpayer CJS Costs	Cost of One Future Offense	Present value cost of one offense	-\$425,122	-\$100,234	-\$105,038	-\$57,962	-\$18,046	-\$23,070	\$0
		W/O Prog., offense distribution ⁽²⁾	100%	0.74%	2.16%	5.71%	8.76%	46.86%	35.77% 0.00%
		Expected cost (PV) of one offense	-\$33,110	-\$3,165	-\$2,167	-\$5,995	-\$5,075	-\$8,457	-\$8,252 \$0
		With Prog., offense distribution	100%	0.74%	2.16%	5.71%	8.76%	46.86%	35.77% 0.00%
		Expected cost (PV) of one offense	-\$33,110	-\$3,165	-\$2,167	-\$5,995	-\$5,075	-\$8,457	-\$8,252 \$0
	Program Benefits and Costs	Adj. 4: (Overall adjustment to cost)	0.9						
		Future CJS costs without program	-\$47,662						
		Future CJS costs with program	-\$47,565						
Victim Monetary Costs	One Victimization Per Offense	Future CJS costs avoided (incurred)	\$97						
		Incremental Treatment Cost (savings)	-\$9,725						
		NPV of the program	\$9,822						
		Benefits per dollar of cost	n/a						
		Pct. reduction to break-even	20.4%						
	Multiple Victimization Per Offense	Estimated present value cost		-\$1,030,410	-\$6,088	-\$2,391	-\$1,423	-\$547	\$0 \$0
		Distribution of one victimization ⁽²⁾	100.00%	0.74%	2.16%	5.71%	8.76%	46.86%	35.77% 0.00%
		Expected cost, one victimization	-\$8,320	-\$7,671	-\$132	-\$136	-\$125	-\$257	\$0 \$0
Vic. Quality of Life Costs	One Victimization	Times prog. change in offenses	\$27						
		Cumulative program benefits	\$124						
		Cumulative NPV	\$9,849						
		Cumulative benefits/dollar of cost	n/a						
		Dist. of multiple victimizations	100%	0.002%	0.07%	0.18%	0.18%	5.51%	94.06% 0.00%
	Multiple Victimization	Lambda per official offense	304.22						
		Expected vict. cost, one offense	-\$20,240	-\$7,740	-\$1,232	-\$1,305	-\$782	-\$9,182	\$0 \$0
		Lambda times change in offenses	-0.99						
	Multiple Victimization	Expected vict. benefits with prog.	\$66	\$25	\$4	\$4	\$3	\$30	\$0 \$0
		Cumulative program benefits	\$162						
		Cumulative NPV	\$9,888						
		Cumulative benefits/dollar of cost	n/a						
	One Victimization	Estimated present value cost		-\$1,912,010	-\$80,688	-\$5,919	-\$7,726	\$0	\$0 \$0
		Expected cost, one victimization	-\$16,992	-\$14,233	-\$1,745	-\$338	-\$677	\$0	\$0 \$0
		Times prog. change in offenses	\$55						
	Multiple Victimization	Cumulative program benefits	\$179						
		Cumulative NPV	\$9,904						
		Cumulative benefits/dollar of cost	n/a						
	Multiple Victimization	Expected vict. cost, one offense	-\$38,163	-\$14,362	-\$16,325	-\$3,232	-\$4,246	\$0	\$0 \$0
		Expected vict. benefits with prog.	\$124	\$47	\$53	\$10	\$14	\$0	\$0 \$0
		Cumulative program benefits	\$286						
		Cumulative NPV	\$10,011						
		Cumulative benefits/dollar of cost	n/a						

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: 0

Table IV—L

Adult Boot Camps--As a Partial Diversion from Regular Incarceration

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person	
	Estimated effect size (from research findings)	-0.002			0.000			
Expected outcomes for those ...								
...without the program ⁽²⁾	53.0%	X	2.22	=	1.176			
...with the program (from effect sizes)	52.9%	X	2.22	=	1.174			
Expected change in the number of offenses ⁽²⁾					-0.002			
Adjustments	Adjustment 1: (felonies as % of total)						100.0%	
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)						73.5%	
	Without the program, the adjusted expected number of offenses per person						1.599	
	With the program, the adjusted expected number of offenses per person						1.596	
	Expected change in the long-run number of offenses, after adjustments						-0.0032	
	Percentage change						-0.2%	
		Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug Misd.
Taxpayer CJS Costs	Cost of One Future Offense	Present value cost of one offense	-\$425,122	-\$100,234	-\$105,038	-\$57,962	-\$18,046	-\$23,070 \$0
	Program Benefits and Costs	W/O Prog., offense distribution ⁽²⁾	100%	0.74%	2.16%	5.71%	8.76%	46.86% 35.77% 0.00%
	Sum- mary	Expected cost (PV) of one offense	-\$33,110	-\$3,165	-\$2,167	-\$5,995	-\$5,075	-\$8,457 -\$8,252 \$0
	One Victimi- zation Per Offense	With Prog., offense distribution	100%	0.74%	2.16%	5.71%	8.76%	46.86% 35.77% 0.00%
	Multiple Victimi- zations Per Offense	Expected cost (PV) of one offense	-\$33,110	-\$3,165	-\$2,167	-\$5,995	-\$5,075	-\$8,457 -\$8,252 \$0
	One Victimi- zation	Adj. 4: (Overall adjustment to cost)	0.9					
Victim Monetary Costs	Estimated present value cost							
	One Victimi- zation Per Offense	Distribution of one victimization ⁽²⁾	100.00%	0.74%	2.16%	5.71%	8.76%	46.86% 35.77% 0.00%
	Multiple Victimi- zations Per Offense	Expected cost, one victimization	-\$8,320	-\$7,671	-\$132	-\$136	-\$125	-\$257 \$0 \$0
	One Victimi- zation	Times prog. change in offenses	\$27					
	Multiple Victimi- zations Per Offense	Cumulative program benefits	\$124					
	One Victimi- zation	Cumulative NPV	\$3,504					
	Multiple Victimi- zations Per Offense	Cumulative benefits/dollar of cost	n/a					
	One Victimi- zation	Dist. of multiple victimizations	100%	0.002%	0.07%	0.18%	0.18%	5.51% 94.06% 0.00%
	Multiple Victimi- zations Per Offense	Lambda per official offense	304.22					
	One Victimi- zation	Expected vict. cost, one offense	-\$20,240	-\$7,740	-\$1,232	-\$1,305	-\$782	-\$9,182 \$0 \$0
	Multiple Victimi- zations Per Offense	Lambda times change in offenses	-0.99					
	One Victimi- zation	Expected vict. benefits with prog.	\$66	\$25	\$4	\$4	\$3	\$30 \$0 \$0
	Multiple Victimi- zations Per Offense	Cumulative program benefits	\$162					
	One Victimi- zation	Cumulative NPV	\$3,542					
	Multiple Victimi- zations Per Offense	Cumulative benefits/dollar of cost	n/a					
Vic. Quality of Life Costs	Estimated present value cost							
	One Victimi- zation	Expected cost, one victimization	-\$16,992	-\$1,912,010	-\$80,688	-\$5,919	-\$7,726	\$0 \$0 \$0
	Multiple Victimi- zations	Times prog. change in offenses	\$55	-\$14,233	-\$1,745	-\$338	-\$677	\$0 \$0 \$0
	One Victimi- zation	Cumulative program benefits	\$179					
	Multiple Victimi- zations	Cumulative NPV	\$3,559					
	One Victimi- zation	Cumulative benefits/dollar of cost	n/a					
	Multiple Victimi- zations	Expected vict. cost, one offense	-\$38,163	-\$14,362	-\$16,325	-\$3,232	-\$4,246	\$0 \$0 \$0
	One Victimi- zation	Expected vict. benefits with prog.	\$124	\$47	\$53	\$10	\$14	\$0 \$0 \$0
	Multiple Victimi- zations	Cumulative program benefits	\$286					
	One Victimi- zation	Cumulative NPV	\$3,666					
	Multiple Victimi- zations	Cumulative benefits/dollar of cost	n/a					

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: 0

Table IV—L

Moral Reconation Therapy

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person	
	Estimated effect size (from research findings)	-0.078			0.000			
	Expected outcomes for those ...							
	...without the program ⁽²⁾		53.0%	X	2.21	=	1.173	
	...with the program (from effect sizes)		49.1%	X	2.21	=	<u>1.087</u>	
	Expected change in the number of offenses ⁽²⁾						<u>-0.086</u>	
Adjustments	Adjustment 1: (felonies as % of total)						100.0%	
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)						89.8%	
	Without the program, the adjusted expected number of offenses per person						1.306	
	With the program, the adjusted expected number of offenses per person						<u>1.211</u>	
	Expected change in the long-run number of offenses, after adjustments						<u>-0.0955</u>	
	Percentage change						-7.3%	
		Total	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.
Taxpayer CJS Costs	Cost of One Future Offense	Present value cost of one offense	-\$416,109	-\$98,667	-\$102,716	-\$57,111	-\$17,679	-\$22,638
		W/O Prog., offense distribution ⁽²⁾	100%	0.76%	1.92%	5.79%	8.58%	46.85%
		Expected cost (PV) of one offense	<u>-\$32,362</u>	-\$3,164	-\$1,893	-\$5,950	-\$4,901	-\$8,282
		With Prog., offense distribution	100%	0.76%	1.92%	5.79%	8.58%	46.85%
		Expected cost (PV) of one offense	<u>-\$32,362</u>	-\$3,164	-\$1,893	-\$5,950	-\$4,901	-\$8,282
	Program Benefits and Costs	Adj. 4: (Overall adjustment to cost)	0.9					\$0
		Future CJS costs without program	-\$38,039					
		Future CJS costs with program	<u>-\$35,258</u>					\$0
		Future CJS costs avoided (incurred)	<u>\$2,781</u>					
		Incremental Treatment Cost (savings)	\$310					
Victim Monetary Costs	One Victimization Per Offense	NPV of the program	\$2,471					
		Benefits per dollar of cost	\$8.98					
		Pct. reduction to break-even	-0.8%					
		Estimated present value cost		-\$1,008,563	-\$5,993	-\$2,338	-\$1,402	-\$536
		Distribution of one victimization ⁽²⁾	100.00%	0.76%	1.92%	5.79%	8.58%	46.85%
	Multiple Victimization Per Offense	Expected cost, one victimization	-\$8,290	-\$7,668	-\$115	-\$135	-\$120	-\$251
		Times prog. change in offenses	\$792					
		Cumulative program benefits	\$3,572					
		Cumulative NPV	<u>\$3,262</u>					
		Cumulative benefits/dollar of cost	\$11.53					
Vic. Quality of Life Costs	One Victimization	Dist. of multiple victimizations	100%	0.003%	0.06%	0.18%	0.18%	5.46%
		Lambda per official offense	306.82					94.12%
		Expected vict. cost, one offense	-\$19,857	-\$7,737	-\$1,076	-\$1,296	-\$755	-\$8,993
		Lambda times change in offenses	-29.29					\$0
		Expected vict. benefits with prog.	\$1,896	\$739	\$103	\$124	\$72	\$859
	Multiple Victimization	Cumulative program benefits	\$4,677					
		Cumulative NPV	<u>\$4,367</u>					
		Cumulative benefits/dollar of cost	\$15.10					
		Estimated present value cost		-\$1,871,472	-\$79,426	-\$5,789	-\$7,613	\$0
		Expected cost, one victimization	-\$16,742	-\$14,229	-\$1,524	-\$335	-\$653	\$0
Multiple Victimization	Multiple Victimization	Times prog. change in offenses	\$1,598					\$0
		Cumulative program benefits	\$5,171					
		Cumulative NPV	<u>\$4,861</u>					
		Cumulative benefits/dollar of cost	\$16.69					
		Expected vict. cost, one offense	-\$35,925	-\$14,357	-\$14,260	-\$3,208	-\$4,100	\$0

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington for non-sex offenders leaving prison, 8 years after release

Table IV—L

Reasoning and Rehabilitation

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses	...the Avg. # of Offenses per Offender	Expected Number of Offenses per Person				
	Estimated effect size (from research findings)	-0.074			0.000	0.974	0.894		
Adjustments	Expected outcomes for those ...								
	...without the program ⁽²⁾	44.5%	X	2.19	=	0.974			
	...with the program (from effect sizes)	40.8%	X	2.19	=	0.894			
	Expected change in the number of offenses ⁽²⁾					-0.081			
Adjustments	Adjustment 1: (felonies as % of total)					100.0%			
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)					89.8%			
	Without the program, the adjusted expected number of offenses per person					1.085			
	With the program, the adjusted expected number of offenses per person					0.995			
	Expected change in the long-run number of offenses, after adjustments					-0.0897			
	Percentage change					-8.3%			
Taxpayer CJS Costs	Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.	
	Cost of One Future Offense	Present value cost of one offense	-\$416,109	-\$98,667	-\$102,716	-\$57,111	-\$17,679	-\$22,638	\$0
	Program Benefits and Costs	W/O Prog., offense distribution ⁽²⁾	100%	0.79%	1.82%	4.17%	8.58%	47.06%	37.57% 0.00%
	Sum- mary	Expected cost (PV) of one offense	-\$31,100	-\$3,289	-\$1,798	-\$4,288	-\$4,900	-\$8,320	-\$8,505 \$0
	One Victimi- zation Per Offense	With Prog., offense distribution	100%	0.79%	1.82%	4.17%	8.58%	47.06%	37.57% 0.00%
	Multiple Victimi- zations Per Offense	Expected cost (PV) of one offense	-\$31,100	-\$3,289	-\$1,798	-\$4,288	-\$4,900	-\$8,320	-\$8,505 \$0
	One Victimi- zation	Adj. 4: (Overall adjustment to cost)	0.9						
	Multiple Victimi- zations	Future CJS costs without program	-\$30,358						
		Future CJS costs with program	-\$27,848						
Victim Monetary Costs	Sum- mary	Future CJS costs avoided (incurred)	\$2,510						
	One Victimi- zation Per Offense	Incremental Treatment Cost (savings)	\$308						
	Multiple Victimi- zations Per Offense	NPV of the program	\$2,202						
	One Victimi- zation	Benefits per dollar of cost	\$8.14						
	Multiple Victimi- zations	Pct. reduction to break-even	-1.0%						
	Sum- mary	Estimated present value cost		-\$1,008,563	-\$5,993	-\$2,338	-\$1,402	-\$536	\$0 \$0
	One Victimi- zation Per Offense	Distribution of one victimization ⁽²⁾	100.00%	0.79%	1.82%	4.17%	8.58%	47.06%	37.57% 0.00%
	Multiple Victimi- zations Per Offense	Expected cost, one victimization	-\$8,552	-\$7,973	-\$109	-\$98	-\$120	-\$252	\$0 \$0
	One Victimi- zation	Times prog. change in offenses	\$767						
Vic. Quality of Life Costs	Sum- mary	Cumulative program benefits	\$3,277						
	One Victimi- zation Per Offense	Cumulative NPV	\$2,969						
	Multiple Victimi- zations Per Offense	Cumulative benefits/dollar of cost	\$10.63						
	One Victimi- zation	Dist. of multiple victimizations	100%	0.003%	0.05%	0.13%	0.17%	5.29%	94.36% 0.00%
	Multiple Victimi- zations	Lambda per official offense	318.51						
	One Victimi- zation	Expected vict. cost, one offense	-\$19,789	-\$8,045	-\$1,022	-\$934	-\$755	-\$9,034	\$0 \$0
	Multiple Victimi- zations	Lambda times change in offenses	-28.56						
	One Victimi- zation	Expected vict. benefits with prog.	\$1,775	\$721	\$92	\$84	\$68	\$810	\$0 \$0
	Multiple Victimi- zations	Cumulative program benefits	\$4,285						
(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent. (2) Based on: Felony re-convictions in Washington for non-sex offenders leaving prison or placed on community supervision, 8-year follow-up	One Victimi- zation	Cumulative NPV	\$3,976						
	Multiple Victimi- zations	Cumulative benefits/dollar of cost	\$13.90						

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington for non-sex offenders leaving prison or placed on community supervision, 8-year follow-up

Table IV—L

Work Release Programs

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person	
	Estimated effect size (from research findings)	-0.027		0.000				
	Expected outcomes for those ...							
	...without the program ⁽²⁾	53.0%	X	2.21	=	1.173		
	...with the program (from effect sizes)	51.7%	X	2.21	=	1.143		
	Expected change in the number of offenses ⁽²⁾						-0.030	
Adjustments	Adjustment 1: (felonies as % of total)						100.0%	
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)						89.8%	
	Without the program, the adjusted expected number of offenses per person						1.306	
	With the program, the adjusted expected number of offenses per person						1.273	
	Expected change in the long-run number of offenses, after adjustments						-0.0331	
	Percentage change						-2.5%	
Taxpayer CJS Costs	Total	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.	
	Murder							
	Present value cost of one offense	-\$416,109	-\$98,667	-\$102,716	-\$57,111	-\$17,679	-\$22,638	\$0
	W/O Prog., offense distribution ⁽²⁾	100%	0.76%	1.92%	5.79%	8.58%	46.85%	36.10% 0.00%
	Expected cost (PV) of one offense	-\$32,362	-\$3,164	-\$1,893	-\$5,950	-\$4,901	-\$8,282	-\$8,172 \$0
	With Prog., offense distribution	100%	0.76%	1.92%	5.79%	8.58%	46.85%	36.10% 0.00%
	Expected cost (PV) of one offense	-\$32,362	-\$3,164	-\$1,893	-\$5,950	-\$4,901	-\$8,282	-\$8,172 \$0
	Adj. 4: (Overall adjustment to cost)	0.9						
	Future CJS costs without program	-\$38,039						
	Future CJS costs with program	-\$37,076						
Victim Monetary Costs	Future CJS costs avoided (incurred)	\$963						
	Incremental Treatment Cost (savings)	\$456						
	NPV of the program	\$507						
	Benefits per dollar of cost	\$2.11						
	Pct. reduction to break-even	-1.2%						
Victim Monetary Costs	Estimated present value cost	-\$1,008,563	-\$5,993	-\$2,338	-\$1,402	-\$536	\$0	\$0
	Distribution of one victimization ⁽²⁾	100.00%	0.76%	1.92%	5.79%	8.58%	46.85%	36.10% 0.00%
	Expected cost, one victimization	-\$8,290	-\$7,668	-\$115	-\$135	-\$120	-\$251	\$0 \$0
	Times prog. change in offenses	\$274						
	Cumulative program benefits	\$1,237						
	Cumulative NPV	\$781						
	Cumulative benefits/dollar of cost	\$2.71						
	Dist. of multiple victimizations	100%	0.003%	0.06%	0.18%	0.18%	5.46%	94.12% 0.00%
	Lambda per official offense	306.82						
	Expected vict. cost, one offense	-\$19,857	-\$7,737	-\$1,076	-\$1,296	-\$755	-\$8,993	\$0 \$0
Vic. Quality of Life Costs	Lambda times change in offenses	-10.14						
	Expected vict. benefits with prog.	\$656	\$256	\$36	\$43	\$25	\$297	\$0 \$0
	Cumulative program benefits	\$1,619						
	Cumulative NPV	\$1,163						
	Cumulative benefits/dollar of cost	\$3.55						
	Estimated present value cost	-\$1,871,472	-\$79,426	-\$5,789	-\$7,613	\$0	\$0	\$0
	Expected cost, one victimization	-\$16,742	-\$14,229	-\$1,524	-\$335	-\$653	\$0	\$0
	Times prog. change in offenses	\$553						
	Cumulative program benefits	\$1,790						
	Cumulative NPV	\$1,334						
Multiple Victimization	Cumulative benefits/dollar of cost	\$3.93						
	Expected vict. cost, one offense	-\$35,925	-\$14,357	-\$14,260	-\$3,208	-\$4,100	\$0	\$0
	Expected vict. benefits with prog.	\$1,188	\$475	\$471	\$106	\$136	\$0	\$0
	Cumulative program benefits	\$2,807						
	Cumulative NPV	\$2,351						
Multiple Victimization	Cumulative benefits/dollar of cost	\$6.15						

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington for non-sex offenders leaving prison, 8 years after release

Table IV—L

Job Counseling & Job Search for Inmates Leaving Prison

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person		
	Estimated effect size (from research findings)	-0.039			0.000				
	Expected outcomes for those ...								
	...without the program ⁽²⁾	53.0%	X	2.21	=	1.173			
	...with the program (from effect sizes)	51.1%	X	2.21	=	<u>1.130</u>			
	Expected change in the number of offenses ⁽²⁾					<u>-0.043</u>			
Adjustments	Adjustment 1: (felonies as % of total)						100.0%		
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)						89.8%		
	Without the program, the adjusted expected number of offenses per person						1.306		
	With the program, the adjusted expected number of offenses per person						<u>1.258</u>		
	Expected change in the long-run number of offenses, after adjustments						<u>-0.0480</u>		
	Percentage change						-3.7%		
Taxpayer CJS Costs	Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.	
	Cost of One Future Offense	Present value cost of one offense	-\$416,109	-\$98,667	-\$102,716	-\$57,111	-\$17,679	-\$22,638	\$0
	W/O Prog., offense distribution ⁽²⁾	100%	0.76%	1.92%	5.79%	8.58%	46.85%	36.10%	0.00%
	Expected cost (PV) of one offense	<u>-\$32,362</u>	-\$3,164	-\$1,893	-\$5,950	-\$4,901	-\$8,282	-\$8,172	\$0
	With Prog., offense distribution	100%	0.76%	1.92%	5.79%	8.58%	46.85%	36.10%	0.00%
	Expected cost (PV) of one offense	<u>-\$32,362</u>	-\$3,164	-\$1,893	-\$5,950	-\$4,901	-\$8,282	-\$8,172	\$0
	Adj. 4: (Overall adjustment to cost)	0.9							
	Program Benefits and Costs	Future CJS costs without program	-\$38,039						
	Future CJS costs with program	<u>-\$36,642</u>							
	Future CJS costs avoided (incurred)	<u>\$1,397</u>							
Victim Monetary Costs	Sum- mary	Incremental Treatment Cost (savings)	\$772						
	One Victimi- zation Per Offense	NPV of the program	\$625						
	Benefits per dollar of cost	\$1.81							
	Pct. reduction to break-even	-2.0%							
	Estimated present value cost		-\$1,008,563	-\$5,993	-\$2,338	-\$1,402	-\$536	\$0	\$0
	Distribution of one victimization ⁽²⁾	100.00%	0.76%	1.92%	5.79%	8.58%	46.85%	36.10%	0.00%
	Expected cost, one victimization	<u>-\$8,290</u>	-\$7,668	-\$115	-\$135	-\$120	-\$251	\$0	\$0
	Times prog. change in offenses	\$398							
	Cumulative program benefits	\$1,794							
	Cumulative NPV	<u>\$1,022</u>							
Vic. Quality of Life Costs	Multiple Victimi- zations Per Offense	Cumulative benefits/dollar of cost	<u>\$2.32</u>						
	Dist. of multiple victimizations	100%	0.003%	0.06%	0.18%	0.18%	5.46%	94.12%	0.00%
	Lambda per official offense	306.82							
	Expected vict. cost, one offense	<u>-\$19,857</u>	-\$7,737	-\$1,076	-\$1,296	-\$755	-\$8,993	\$0	\$0
	Lambda times change in offenses	-14.72							
	Expected vict. benefits with prog.	\$952	\$371	\$52	\$62	\$36	\$431	\$0	\$0
	Cumulative program benefits	\$2,349							
	Cumulative NPV	<u>\$1,577</u>							
	Cumulative benefits/dollar of cost	<u>\$3.04</u>							
	Estimated present value cost		-\$1,871,472	-\$79,426	-\$5,789	-\$7,613	\$0	\$0	\$0
Multiple Victimi- zations	One Victimi- zation	Expected cost, one victimization	<u>-\$16,742</u>	-\$14,229	-\$1,524	-\$335	-\$653	\$0	\$0
	Times prog. change in offenses	\$803							
	Cumulative program benefits	\$2,597							
	Cumulative NPV	<u>\$1,825</u>							
	Cumulative benefits/dollar of cost	<u>\$3.36</u>							
	Expected vict. cost, one offense	<u>-\$35,925</u>	-\$14,357	-\$14,260	-\$3,208	-\$4,100	\$0	\$0	\$0
	Expected vict. benefits with prog.	<u>\$1,723</u>	\$689	\$684	\$154	\$197	\$0	\$0	\$0
	Cumulative program benefits	\$4,072							
	Cumulative NPV	<u>\$3,300</u>							
	Cumulative benefits/dollar of cost	<u>\$5.27</u>							

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington for non-sex offenders leaving prison, 8 years after release

Table IV—L

Adult Basic Education

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses	...the Avg. # of Offenses per Offender	Expected Number of Offenses per Person				
	Estimated effect size (from research findings)	-0.107			1.173	1.055	-0.118		
Adjustments	Expected outcomes for thosewithout the program ⁽²⁾ ...with the program (from effect sizes)	53.0% 47.7%	X X	2.21 2.21	= =	1.173 <u>1.055</u>			
	Expected change in the number of offenses ⁽²⁾						-0.118		
	Adjustment 1: (felonies as % of total)						100.0%		
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)						89.8%		
	Without the program, the adjusted expected number of offenses per person						1.306		
	With the program, the adjusted expected number of offenses per person						<u>1.175</u>		
	Expected change in the long-run number of offenses, after adjustments						-0.1313		
	Percentage change						-10.1%		
		Total	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.	
Taxpayer CJS Costs	Cost of One Future Offense	Present value cost of one offense	-\$416,109	-\$98,667	-\$102,716	-\$57,111	-\$17,679	-\$22,638	\$0
		W/O Prog., offense distribution ⁽²⁾	100%	0.76%	1.92%	5.79%	8.58%	46.85%	36.10% 0.00%
		Expected cost (PV) of one offense	-\$32,362	-\$3,164	-\$1,893	-\$5,950	-\$4,901	-\$8,282	-\$8,172 \$0
		With Prog., offense distribution	100%	0.76%	1.92%	5.79%	8.58%	46.85%	36.10% 0.00%
		Expected cost (PV) of one offense	-\$32,362	-\$3,164	-\$1,893	-\$5,950	-\$4,901	-\$8,282	-\$8,172 \$0
	Program Benefits and Costs	Adj. 4: (Overall adjustment to cost)	0.9						
		Future CJS costs without program	-\$38,039						
		Future CJS costs with program	-\$34,215						
		Future CJS costs avoided (incurred)	\$3,824						
		Incremental Treatment Cost (savings)	\$1,972						
Victim Monetary Costs	Sum- mary	NPV of the program	\$1,852						
		Benefits per dollar of cost	\$1.94						
		Pct. reduction to break-even	-5.2%						
		Estimated present value cost							
		Distribution of one victimization ⁽²⁾	100.00%	0.76%	1.92%	5.79%	8.58%	46.85%	36.10% 0.00%
	One Victim- ization Per Offense	Expected cost, one victimization	-\$8,290	-\$7,668	-\$115	-\$135	-\$120	-\$251	\$0 \$0
		Times prog. change in offenses	\$1,089						
		Cumulative program benefits	\$4,913						
		Cumulative NPV	\$2,940						
		Cumulative benefits/dollar of cost	\$2.49						
Vic. Quality of Life Costs	Multiple Victimi- zations Per Offense	Dist. of multiple victimizations	100%	0.003%	0.06%	0.18%	0.18%	5.46%	94.12% 0.00%
		Lambda per official offense	306.82						
		Expected vict. cost, one offense	-\$19,857	-\$7,737	-\$1,076	-\$1,296	-\$755	-\$8,993	\$0 \$0
		Lambda times change in offenses	-40.29						
		Expected vict. benefits with prog.	\$2,607	\$1,016	\$141	\$170	\$99	\$1,181	\$0 \$0
		Cumulative program benefits	\$6,432						
		Cumulative NPV	\$4,459						
		Cumulative benefits/dollar of cost	\$3.26						
	One Victimi- zation	Estimated present value cost							
		Expected cost, one victimization	-\$16,742	-\$1,871,472	-\$79,426	-\$5,789	-\$7,613	\$0	\$0 \$0
		Times prog. change in offenses	\$2,198	-\$14,229	-\$1,524	-\$335	-\$653	\$0	\$0 \$0
		Cumulative program benefits	\$7,111						
		Cumulative NPV	\$5,139						
Multiple Victimi- zations		Cumulative benefits/dollar of cost	\$3.61						
		Expected vict. cost, one offense	-\$35,925	-\$14,357	-\$14,260	-\$3,208	-\$4,100	\$0	\$0 \$0
		Expected vict. benefits with prog.	\$4,717	\$1,885	\$1,872	\$421	\$538	\$0	\$0 \$0
		Cumulative program benefits	\$11,149						
		Cumulative NPV	\$9,176						
		Cumulative benefits/dollar of cost	\$5.65						

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington for non-sex offenders leaving prison, 8 years after release

Table IV—L

Adult In-Prison Vocational Education

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person		
	Estimated effect size (from research findings)	-0.134		0.000					
	Expected outcomes for those ...								
	...without the program ⁽²⁾	53.0%	X	2.21	=	1.173			
	...with the program (from effect sizes)	46.3%	X	2.21	=	<u>1.025</u>			
	Expected change in the number of offenses ⁽²⁾					<u>-0.148</u>			
Adjustments	Adjustment 1: (felonies as % of total)					100.0%			
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)					89.8%			
	Without the program, the adjusted expected number of offenses per person					1.306			
	With the program, the adjusted expected number of offenses per person					<u>1.141</u>			
	Expected change in the long-run number of offenses, after adjustments					<u>-0.1646</u>			
	Percentage change					-12.6%			
Taxpayer CJS Costs	Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.	
	Cost of One Future Offense	Present value cost of one offense	-\$416,109	-\$98,667	-\$102,716	-\$57,111	-\$17,679	-\$22,638	\$0
	Program Benefits and Costs	W/O Prog., offense distribution ⁽²⁾	100%	0.76%	1.92%	5.79%	8.58%	46.85%	36.10% 0.00%
	Sum- mary	Expected cost (PV) of one offense	-\$32,362	-\$3,164	-\$1,893	-\$5,950	-\$4,901	-\$8,282	-\$8,172 \$0
	One Victimi- zation Per Offense	With Prog., offense distribution	100%	0.76%	1.92%	5.79%	8.58%	46.85%	36.10% 0.00%
	Multiple Victimi- zations Per Offense	Expected cost (PV) of one offense	-\$32,362	-\$3,164	-\$1,893	-\$5,950	-\$4,901	-\$8,282	-\$8,172 \$0
	One Victimi- zation	Adj. 4: (Overall adjustment to cost)	0.9						
	Multiple Victimi- zations	Future CJS costs without program	-\$38,039						
	One Victimi- zation	Future CJS costs with program	-\$33,245						
	Multiple Victimi- zations	Future CJS costs avoided (incurred)	\$4,794						
Victim Monetary Costs	Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.	
	One Victimi- zation Per Offense	Estimated present value cost	-\$1,008,563	-\$5,993	-\$2,338	-\$1,402	-\$536	\$0	\$0
	One Victimi- zation	Distribution of one victimization ⁽²⁾	100.00%	0.76%	1.92%	5.79%	8.58%	46.85%	36.10% 0.00%
	Multiple Victimi- zations	Expected cost, one victimization	-\$8,290	-\$7,668	-\$115	-\$135	-\$120	-\$251	\$0 \$0
	One Victimi- zation	Times prog. change in offenses	\$1,365						
	Multiple Victimi- zations	Cumulative program benefits	\$6,159						
	One Victimi- zation	Cumulative NPV	\$4,199						
	Multiple Victimi- zations	Cumulative benefits/dollar of cost	\$3.14						
	One Victimi- zation	Dist. of multiple victimizations	100%	0.003%	0.06%	0.18%	0.18%	5.46%	94.12% 0.00%
	Multiple Victimi- zations	Lambda per official offense	306.82						
Vic. Quality of Life Costs	Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.	
	One Victimi- zation	Expected vict. cost, one offense	-\$19,857	-\$7,737	-\$1,076	-\$1,296	-\$755	-\$8,993	\$0 \$0
	One Victimi- zation	Lambda times change in offenses	-50.51						
	Multiple Victimi- zations	Expected vict. benefits with prog.	\$3,269	\$1,274	\$177	\$213	\$124	\$1,480	\$0 \$0
	One Victimi- zation	Cumulative program benefits	\$8,063						
	Multiple Victimi- zations	Cumulative NPV	\$6,103						
	One Victimi- zation	Cumulative benefits/dollar of cost	\$4.11						
	One Victimi- zation	Estimated present value cost	-\$1,871,472	-\$79,426	-\$5,789	-\$7,613	\$0	\$0	\$0
	Multiple Victimi- zations	Expected cost, one victimization	-\$16,742	-\$14,229	-\$1,524	-\$335	-\$653	\$0	\$0
	One Victimi- zation	Times prog. change in offenses	\$2,756						
(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent. (2) Based on: Felony re-convictions in Washington for non-sex offenders leaving prison, 8 years after release	Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug	Misd.	
	One Victimi- zation	Cumulative program benefits	\$8,915						
	Multiple Victimi- zations	Cumulative NPV	\$6,955						
	One Victimi- zation	Cumulative benefits/dollar of cost	\$4.55						
	One Victimi- zation	Expected vict. cost, one offense	-\$35,925	-\$14,357	-\$14,260	-\$3,208	-\$4,100	\$0	\$0
	Multiple Victimi- zations	Expected vict. benefits with prog.	\$5,914	\$2,363	\$2,347	\$528	\$675	\$0	\$0
	One Victimi- zation	Cumulative program benefits	\$13,977						
	Multiple Victimi- zations	Cumulative NPV	\$12,017						
	One Victimi- zation	Cumulative benefits/dollar of cost	\$7.13						

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington for non-sex offenders leaving prison, 8 years after release

Table IV—L

Adult Correctional Industries

Program Effectiveness (Crime Outcomes)	The expected effect of the program on...		...the Percent with Offenses or Re-Offenses		...the Avg. # of Offenses per Offender		Expected Number of Offenses per Person	
	Estimated effect size (from research findings)	-0.084		0.000				
	Expected outcomes for those ...							
	...without the program ⁽²⁾	44.4%	X	2.07	=	0.922		
	...with the program (from effect sizes)	40.3%	X	2.07	=	<u>0.835</u>		
	Expected change in the number of offenses ⁽²⁾					<u>-0.086</u>		
Adjustments	Adjustment 1: (felonies as % of total)					100.0%		
	Adjustment 2: (percent of expected future offending in the follow up period in footnote ⁽²⁾)					99.2%		
	Without the program, the adjusted expected number of offenses per person					0.930		
	With the program, the adjusted expected number of offenses per person					<u>0.842</u>		
	Expected change in the long-run number of offenses, after adjustments					<u>-0.0872</u>		
	Percentage change					-9.4%		
		Total	Murder	Sex Offenses	Robbery	Agg. Assault	Fel. Prop.	Drug Misd.
Taxpayer CJS Costs	Cost of One Future Offense	Present value cost of one offense	-\$424,866	-\$101,945	-\$104,037	-\$59,100	-\$18,095	-\$23,247 \$0
		W/O Prog., offense distribution ⁽²⁾	100%	0.73%	6.60%	5.91%	9.78%	41.29% 35.69% 0.00%
		Expected cost (PV) of one offense	<u>-\$37,543</u>	-\$3,122	-\$6,725	-\$6,148	-\$5,780	-\$7,471 -\$8,297 \$0
		With Prog., offense distribution	100%	0.73%	6.60%	5.91%	9.78%	41.29% 35.69% 0.00%
		Expected cost (PV) of one offense	<u>-\$37,543</u>	-\$3,122	-\$6,725	-\$6,148	-\$5,780	-\$7,471 -\$8,297 \$0
	Program Benefits and Costs	Adj. 4: (Overall adjustment to cost)	<u>0.9</u>					
		Future CJS costs without program	-\$31,412					
		Future CJS costs with program	<u>-\$28,465</u>					
		Future CJS costs avoided (incurred)	<u>\$2,947</u>					
		Incremental Treatment Cost (savings)	\$1,800					
Victim Monetary Costs	One Victimization Per Offense	NPV of the program	\$1,147					
		Benefits per dollar of cost	\$1.64					
		Pct. reduction to break-even	-5.7%					
		Estimated present value cost						
		Distribution of one victimization ⁽²⁾	100.00%	0.73%	6.60%	5.91%	9.78%	41.29% 35.69% 0.00%
	Multiple Victimization Per Offense	Expected cost, one victimization	-\$8,484	-\$7,567	-\$408	-\$140	-\$142	-\$227 \$0 \$0
		Times prog. change in offenses	\$740					
		Cumulative program benefits	\$3,687					
		Cumulative NPV	\$1,887					
		Cumulative benefits/dollar of cost	\$2.05					
Vic. Quality of Life Costs	One Victimization	Dist. of multiple victimizations	100%	0.002%	0.20%	0.19%	0.20%	4.89% 94.51% 0.00%
		Lambda per official offense	302.12					
		Expected vict. cost, one offense	-\$21,798	-\$7,636	-\$3,822	-\$1,339	-\$890	-\$8,112 \$0 \$0
		Lambda times change in offenses	-26.35					
		Expected vict. benefits with prog.	\$1,901	\$666	\$333	\$117	\$78	\$707 \$0 \$0
	Multiple Victimization	Cumulative program benefits	\$4,848					
		Cumulative NPV	\$3,048					
		Cumulative benefits/dollar of cost	\$2.69					
		Estimated present value cost						
		Expected cost, one victimization	-\$20,573	-\$1,910,857	-\$82,066	-\$5,863	-\$7,878	\$0 \$0 \$0
	Multiple Victimization	Times prog. change in offenses	\$1,794	-\$14,042	-\$5,414	-\$346	-\$770	\$0 \$0 \$0
		Cumulative program benefits	\$5,482					
		Cumulative NPV	\$3,681					
		Cumulative benefits/dollar of cost	\$3.04					
		Expected vict. cost, one offense	-\$72,970	-\$14,169	-\$50,652	-\$3,314	-\$4,835	\$0 \$0 \$0

(1) Note: This run assumes a single arrest per measured offense. The discount rate used is: 3 percent.

(2) Based on: Felony re-convictions in Washington for sex offenders leaving prison, 8 years after release

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